

Figure 1

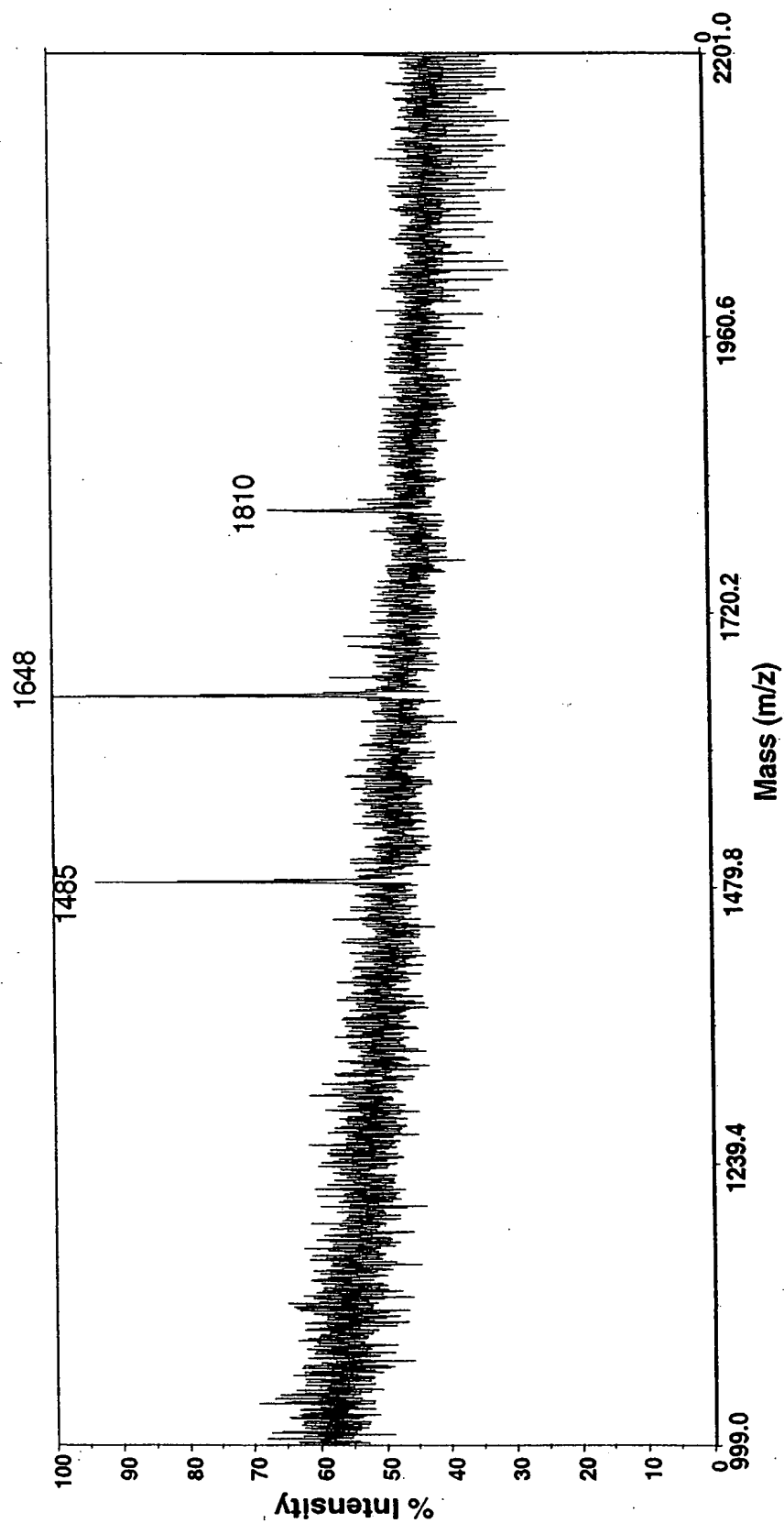


Figure 2

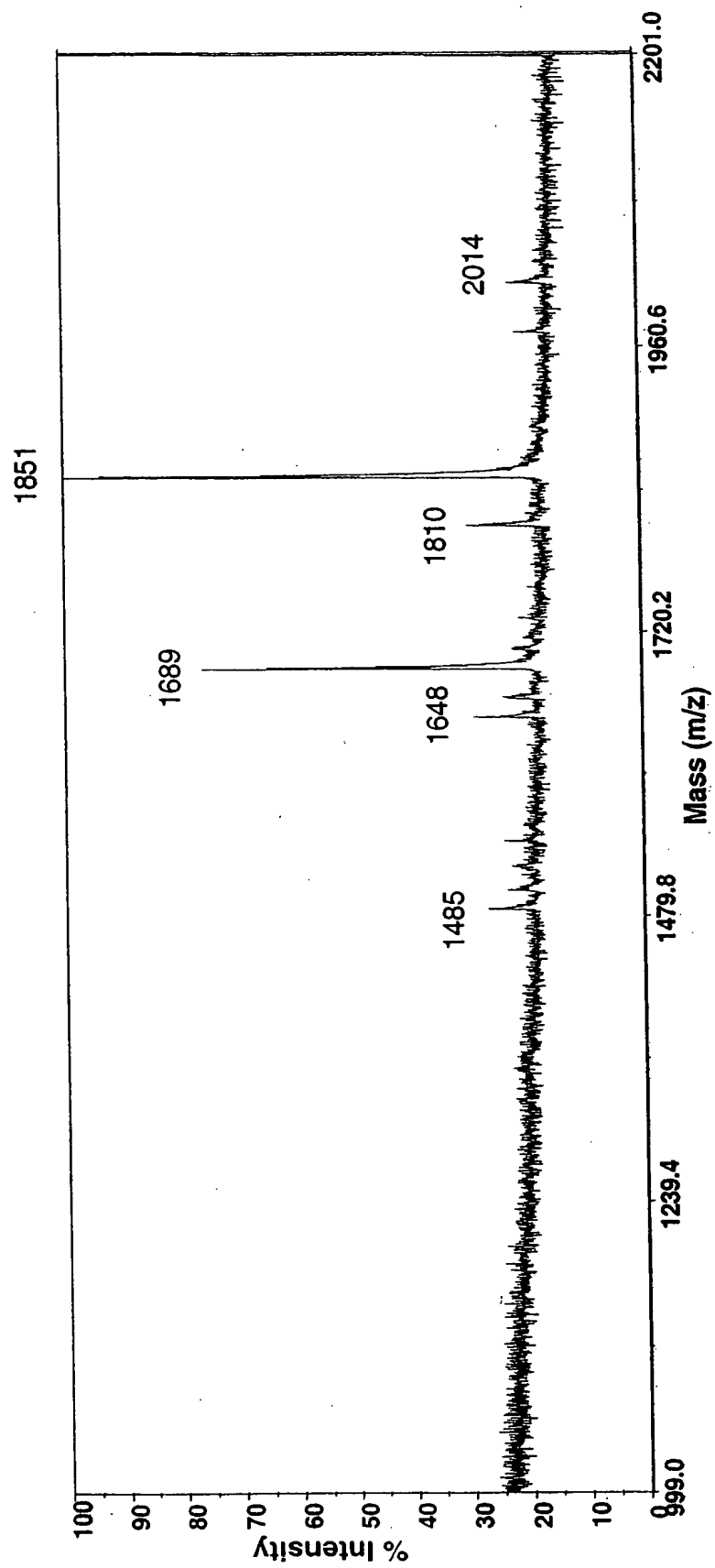


Figure 3

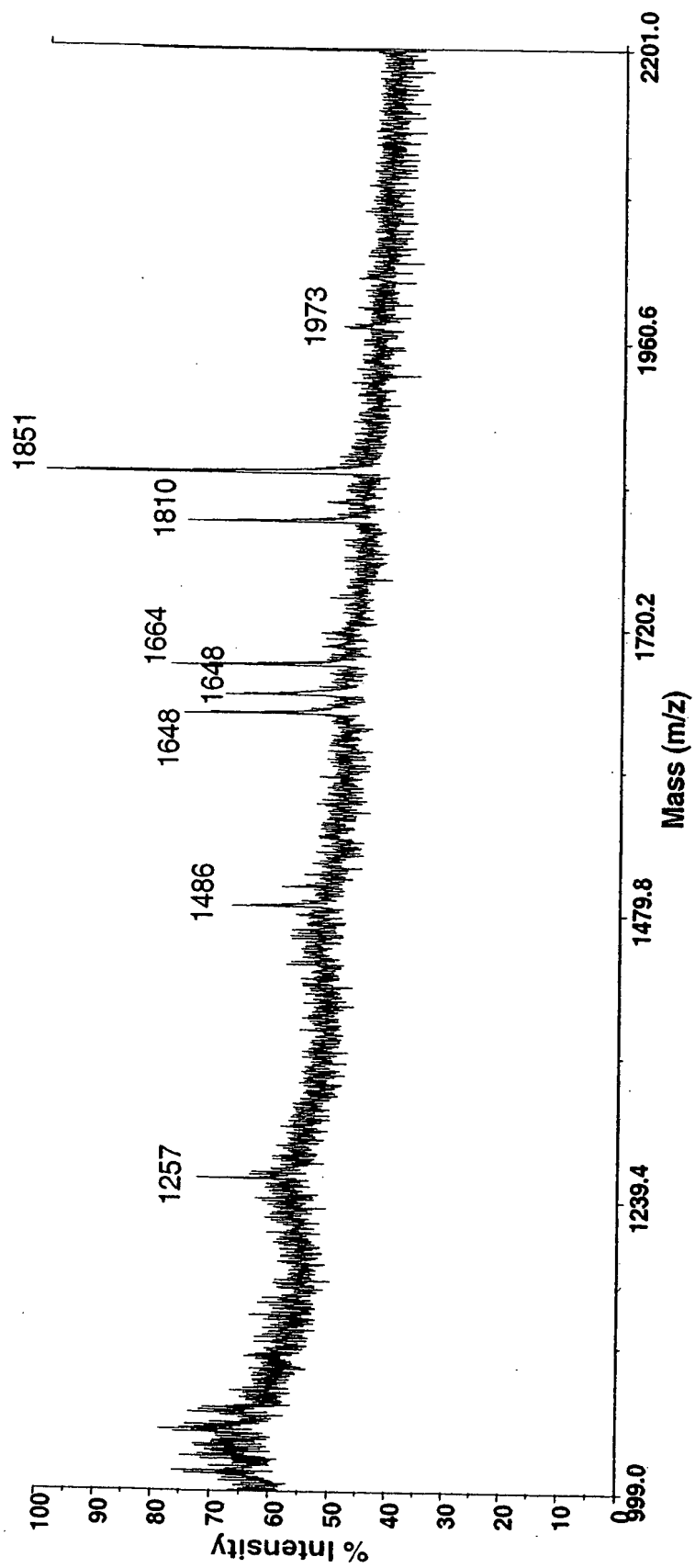


Figure 4

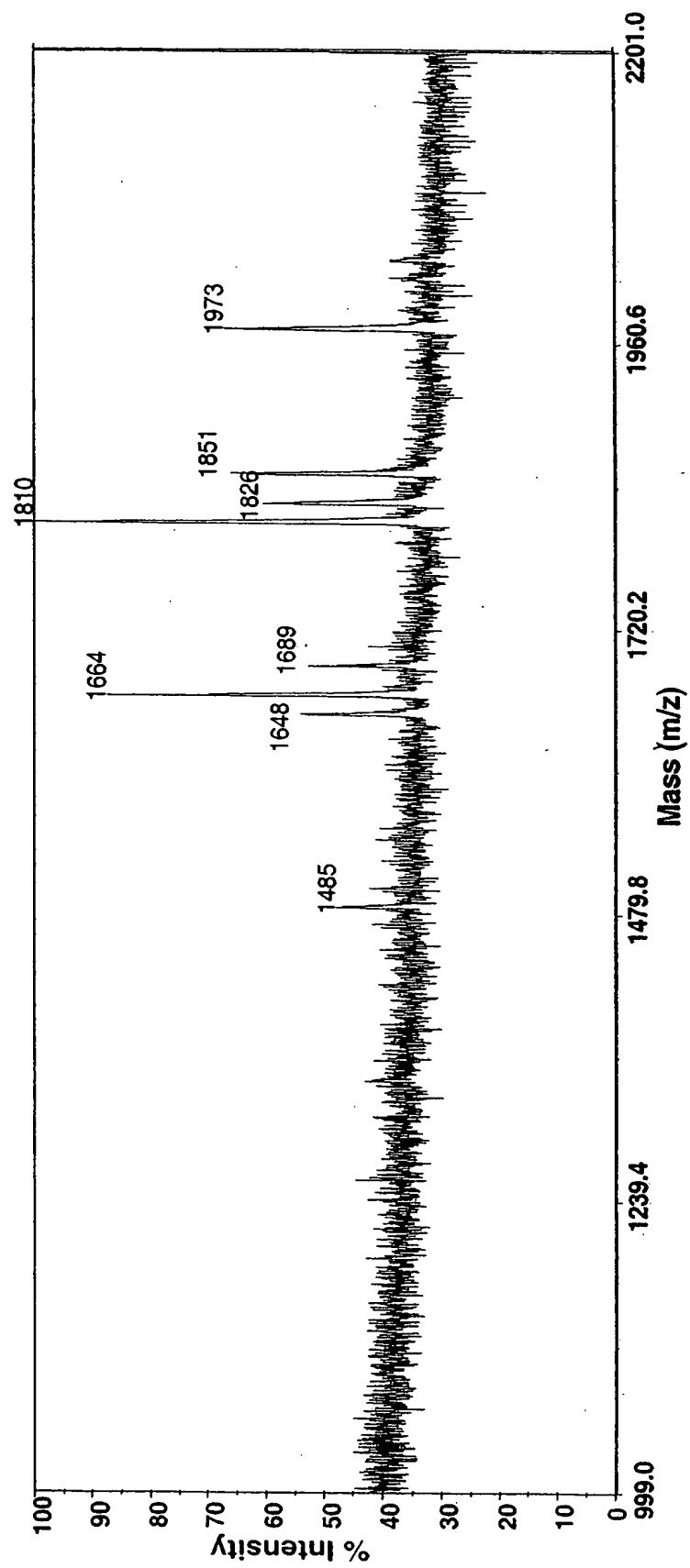


Figure 5

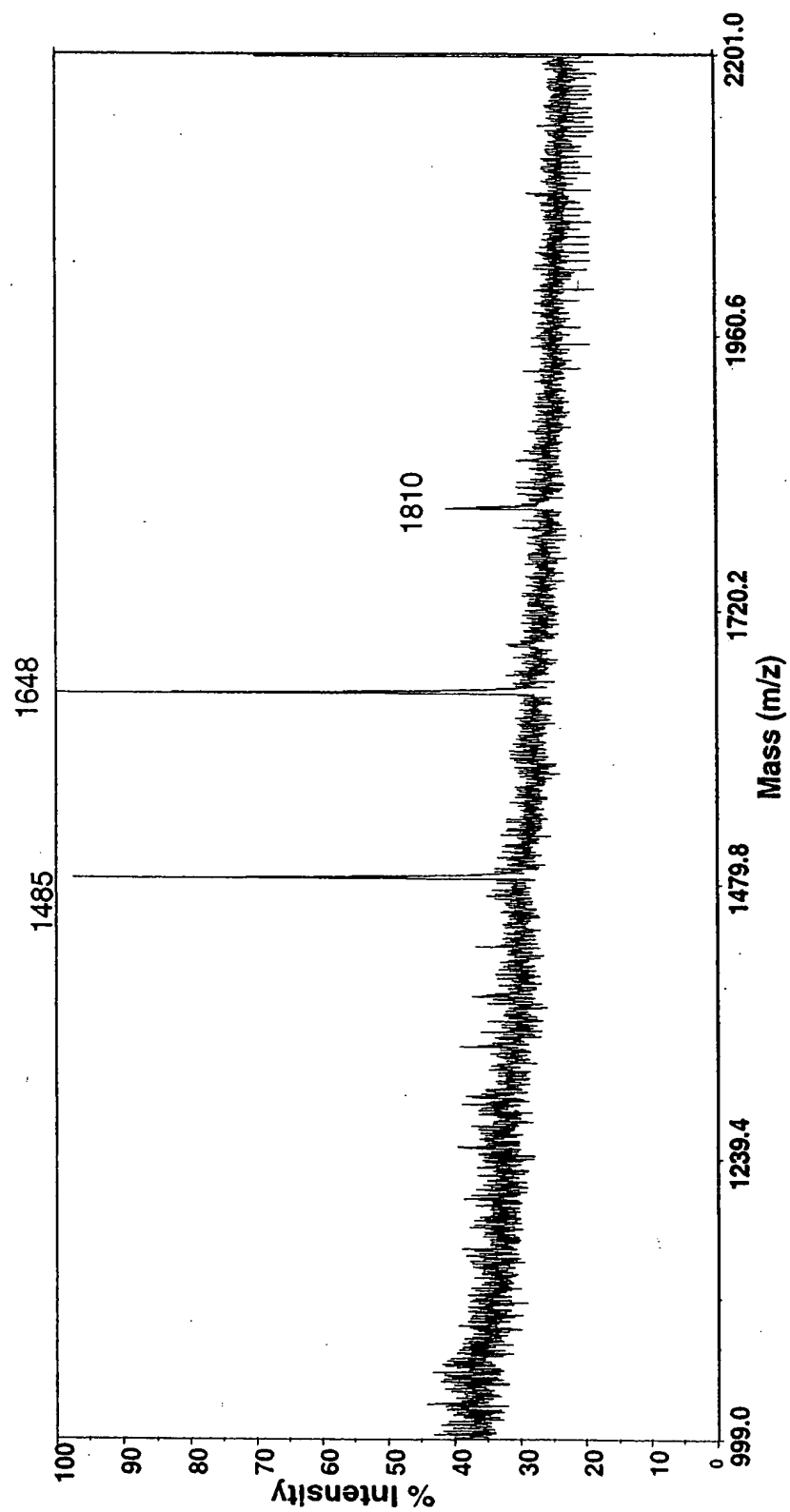


Figure 6

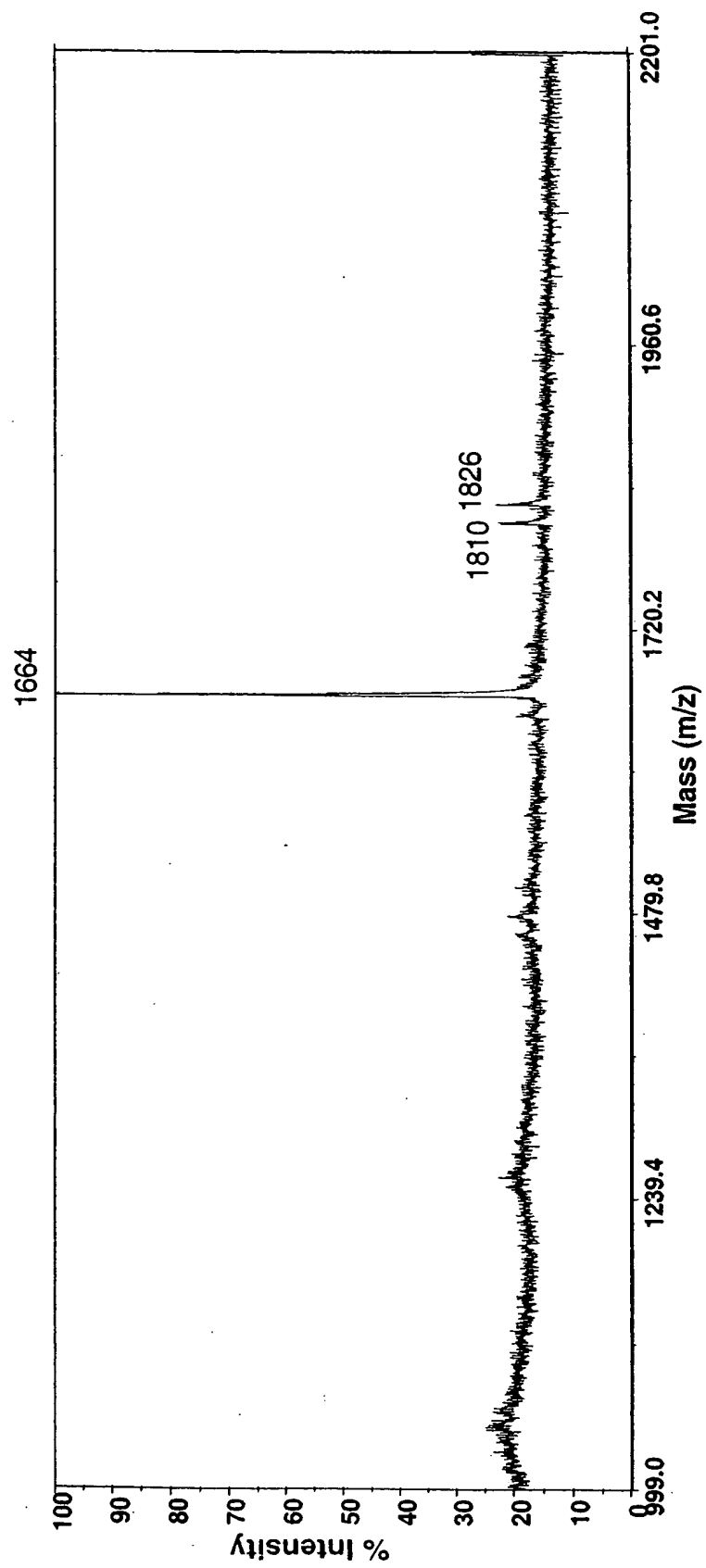
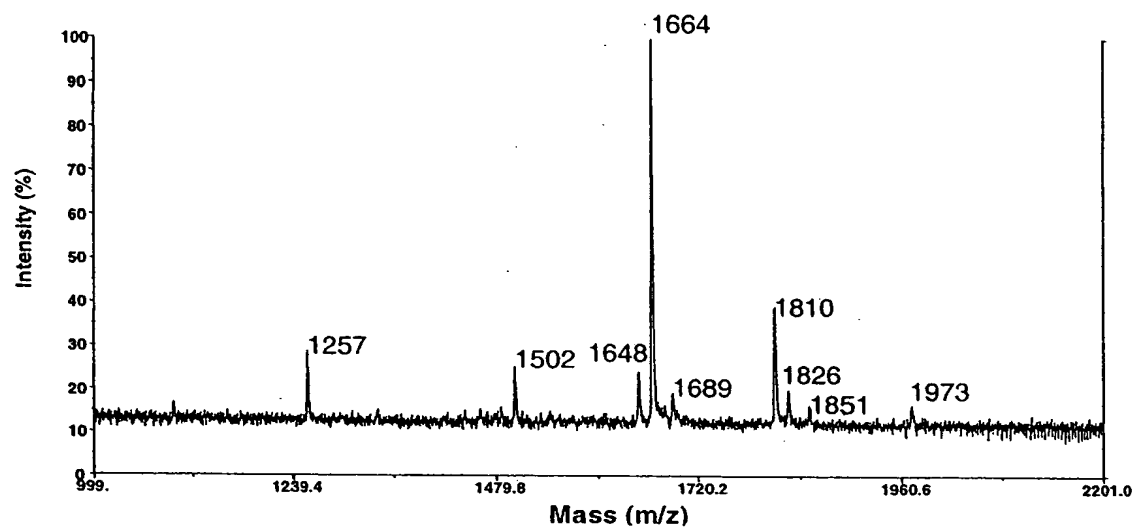


Figure 7

(a)



(b)

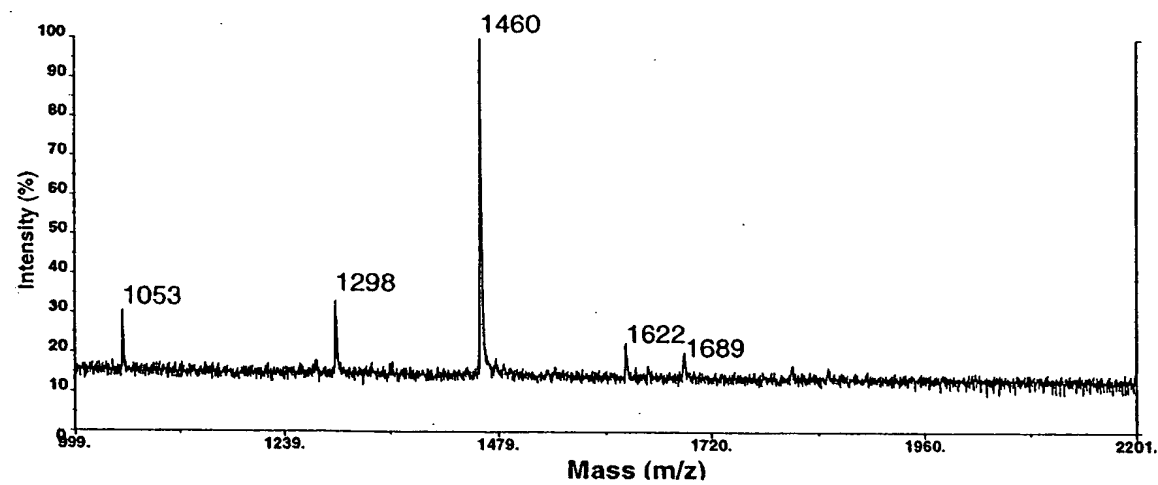


Figure 8

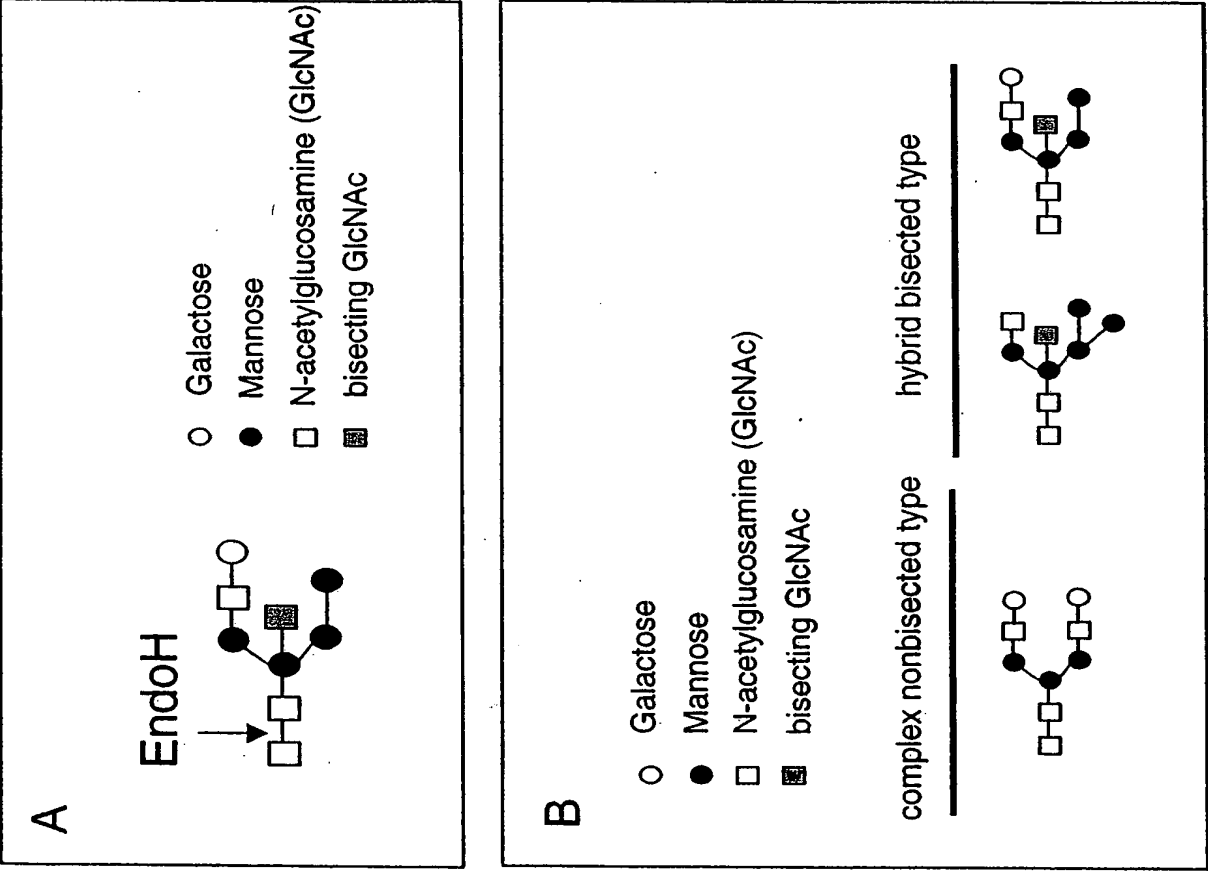


Figure 9

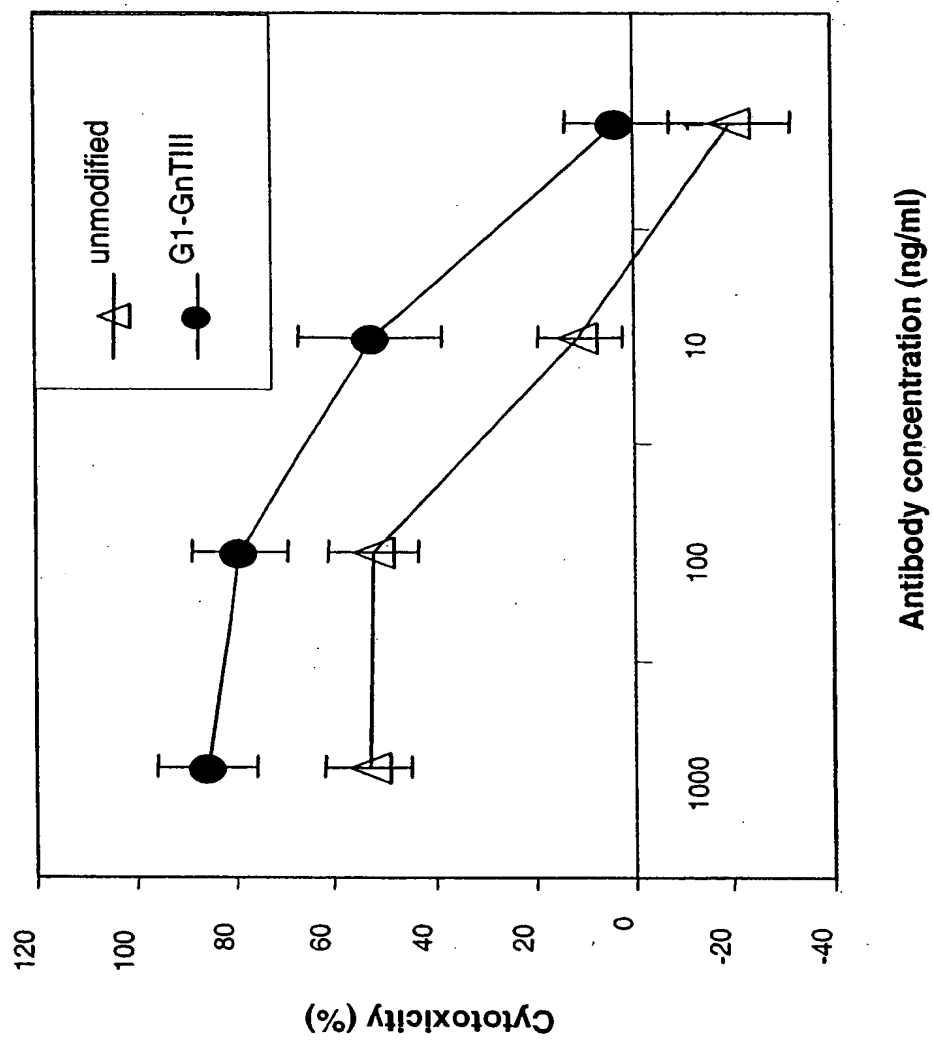


Figure 10

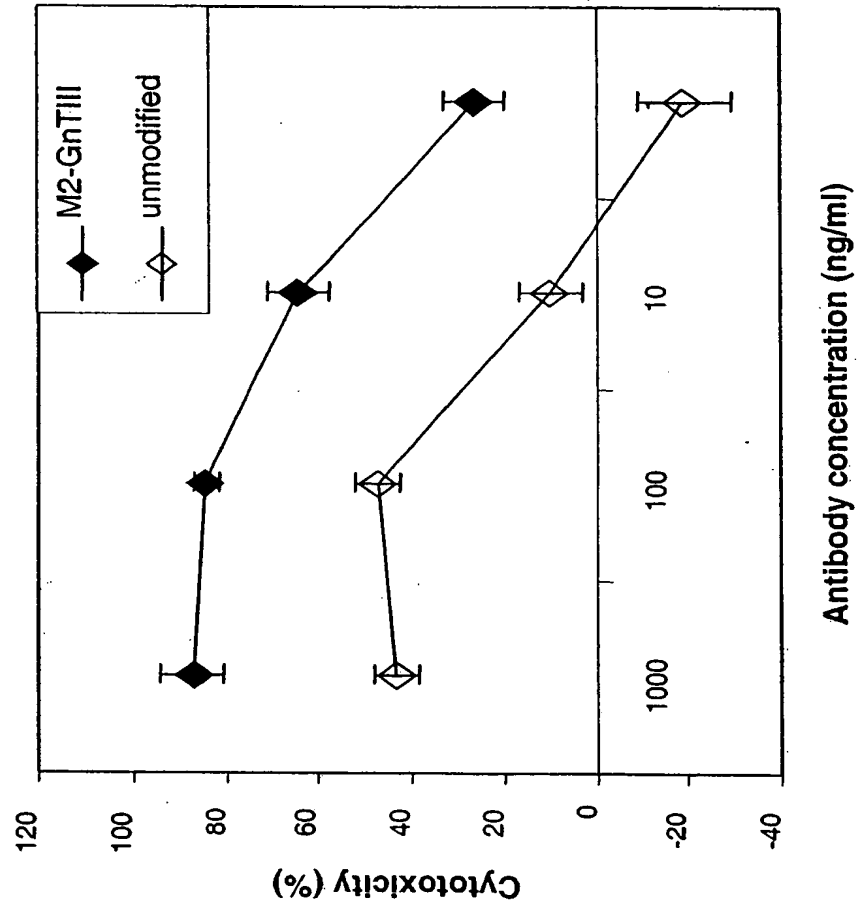


Figure 11

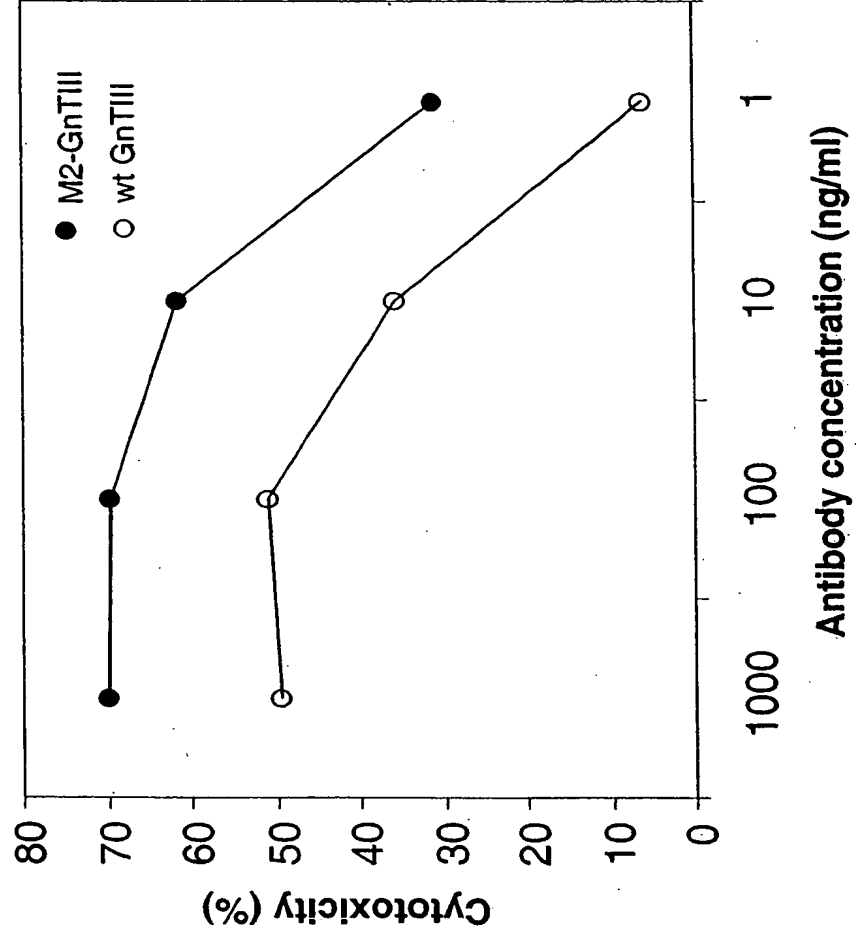


Figure 12

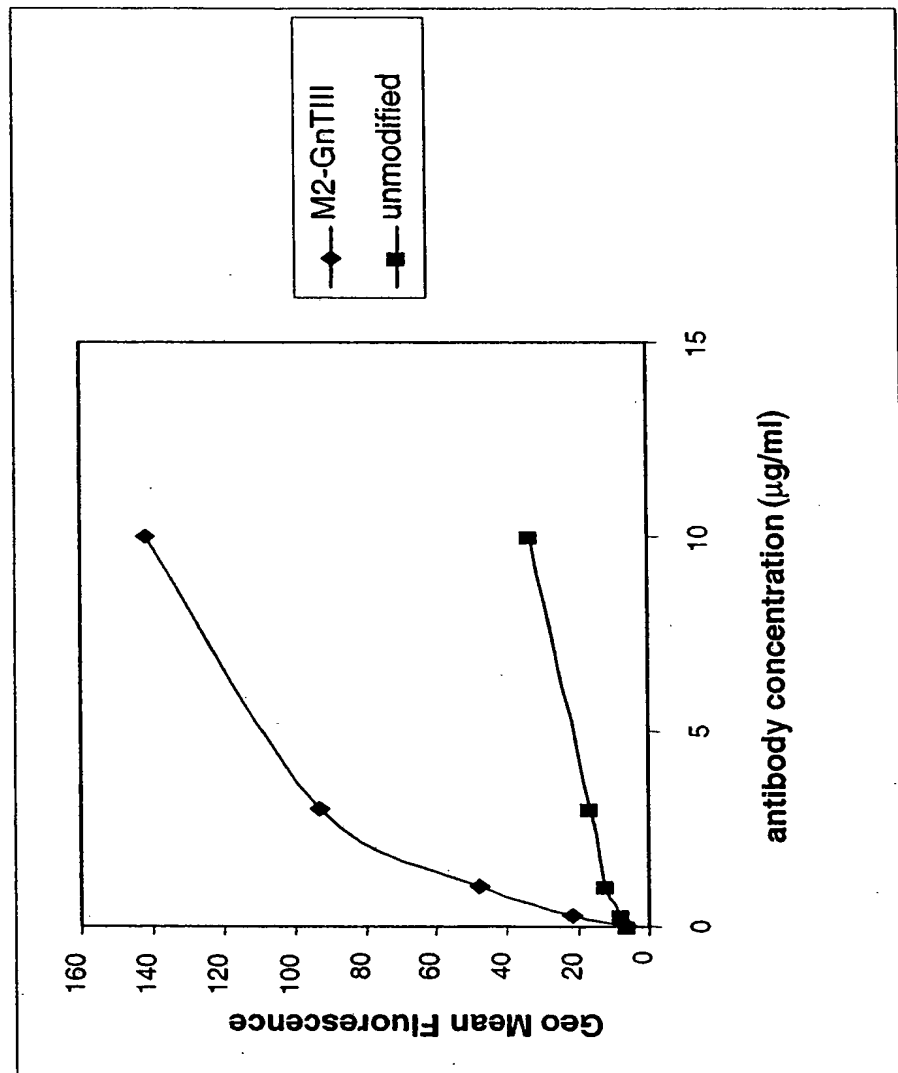


Figure 13

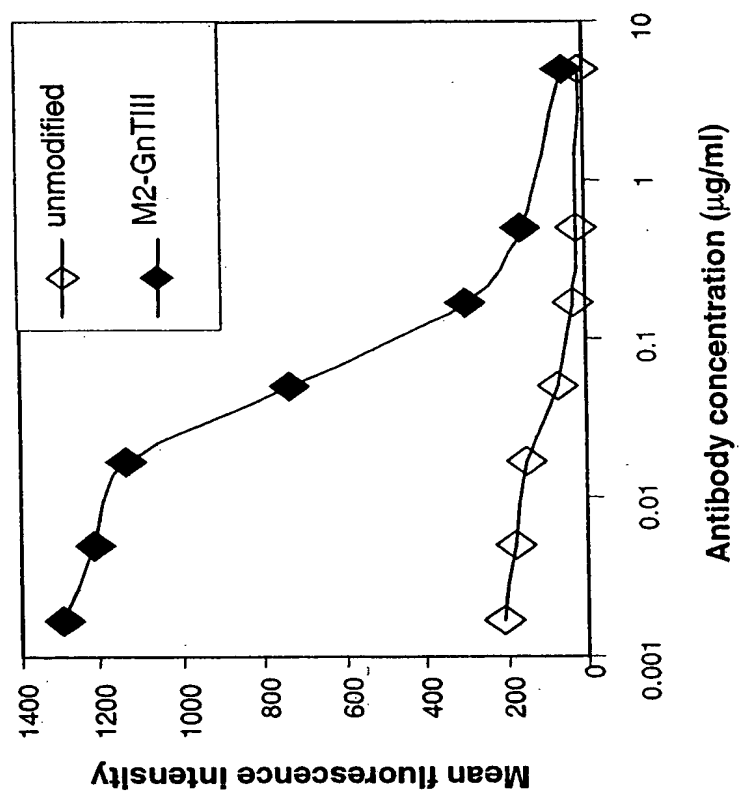


Figure 14

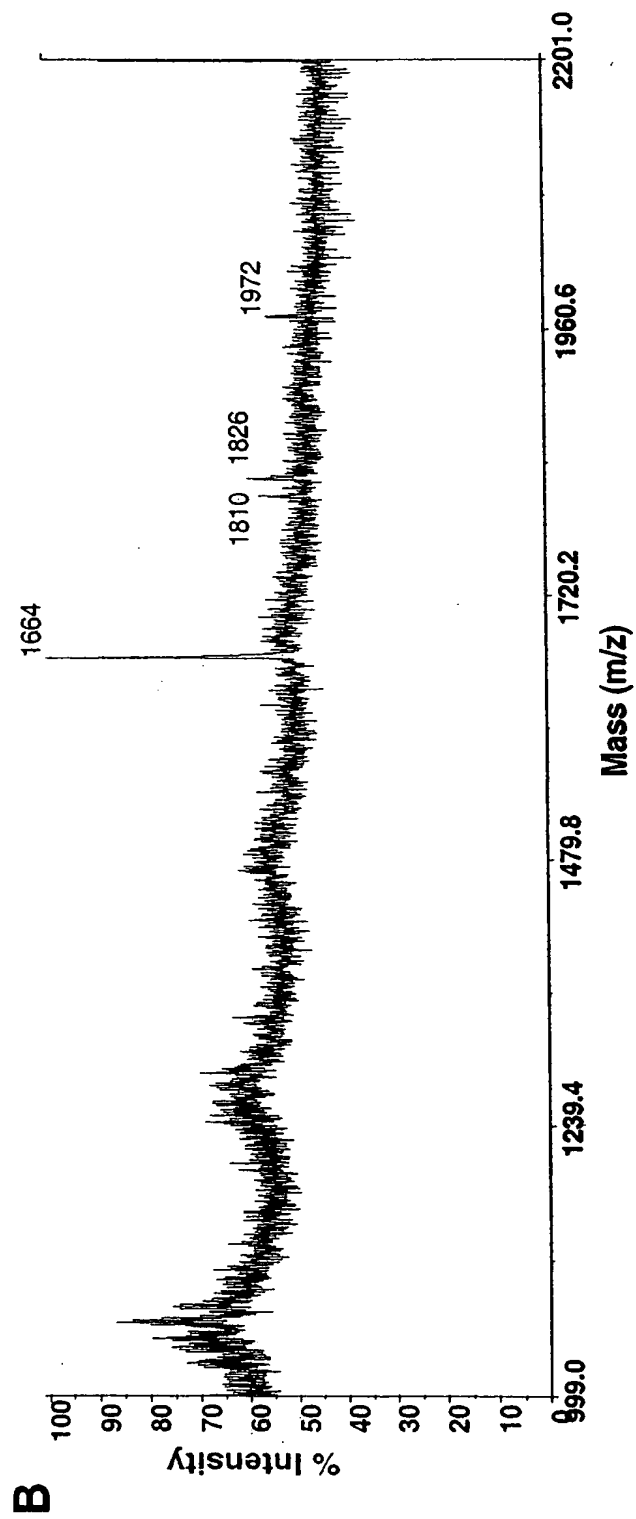
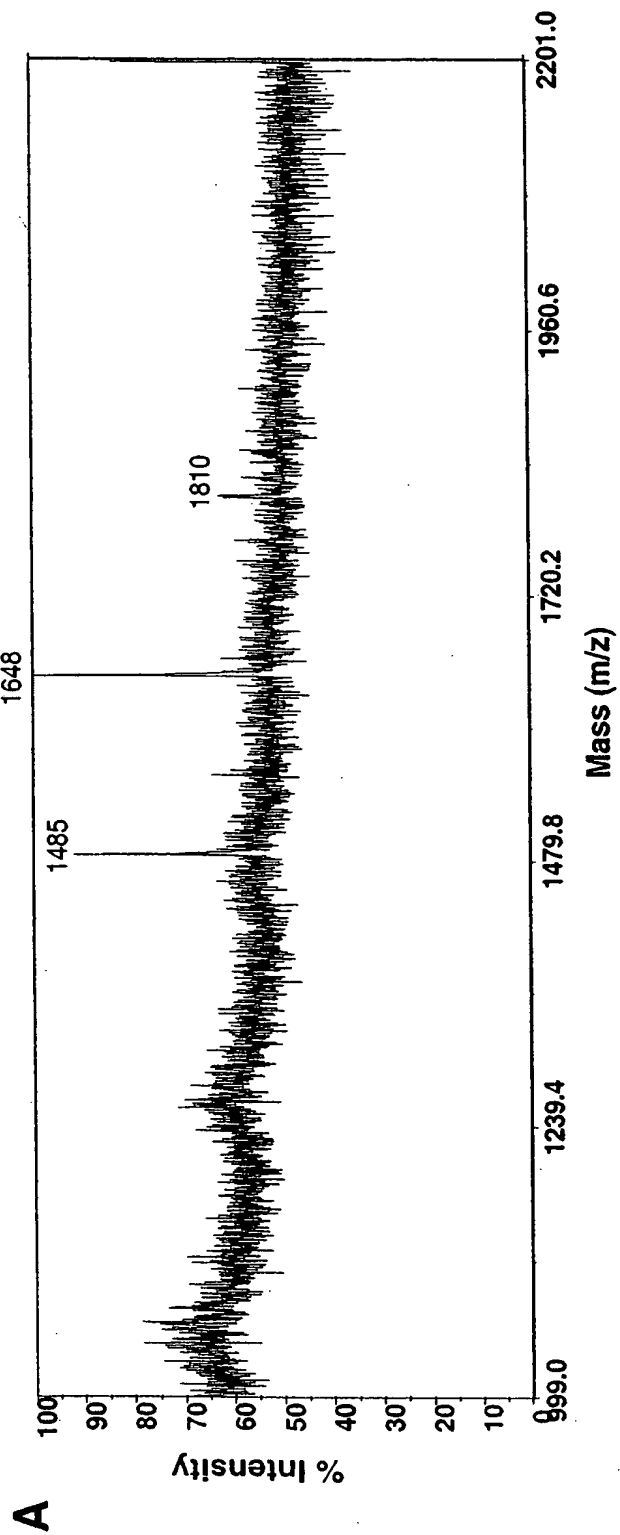


Figure 15

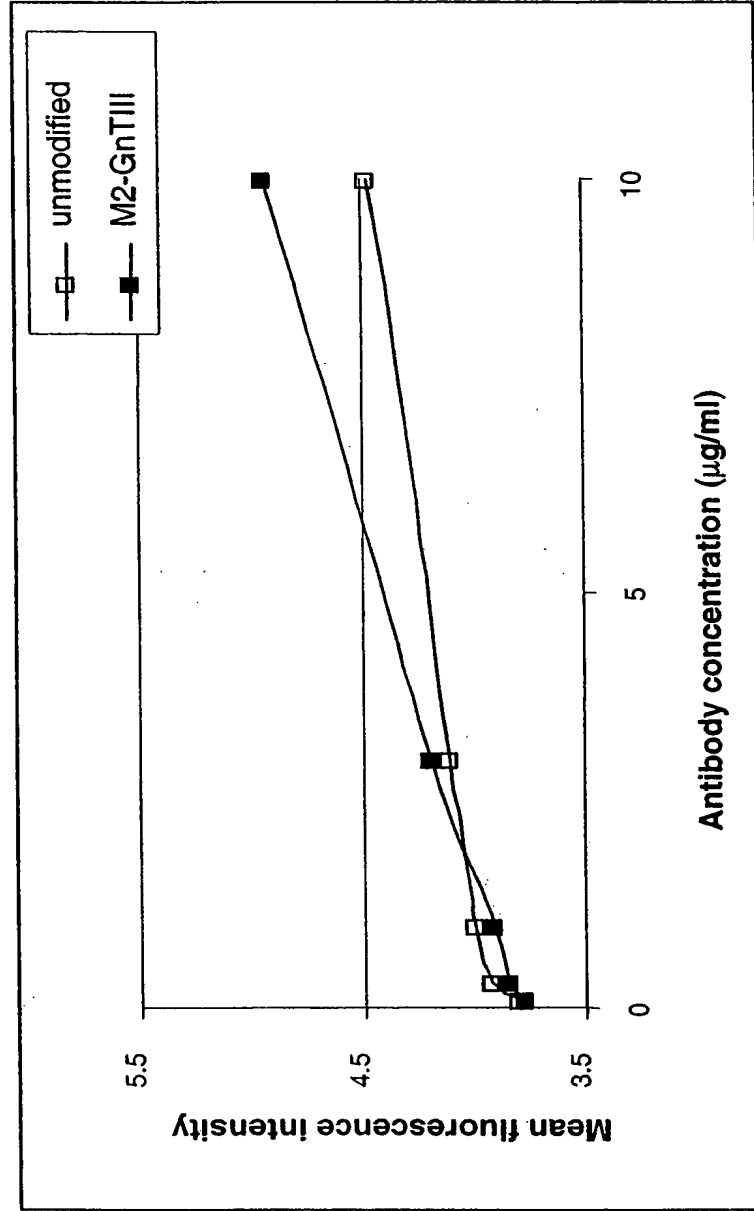


Figure 16

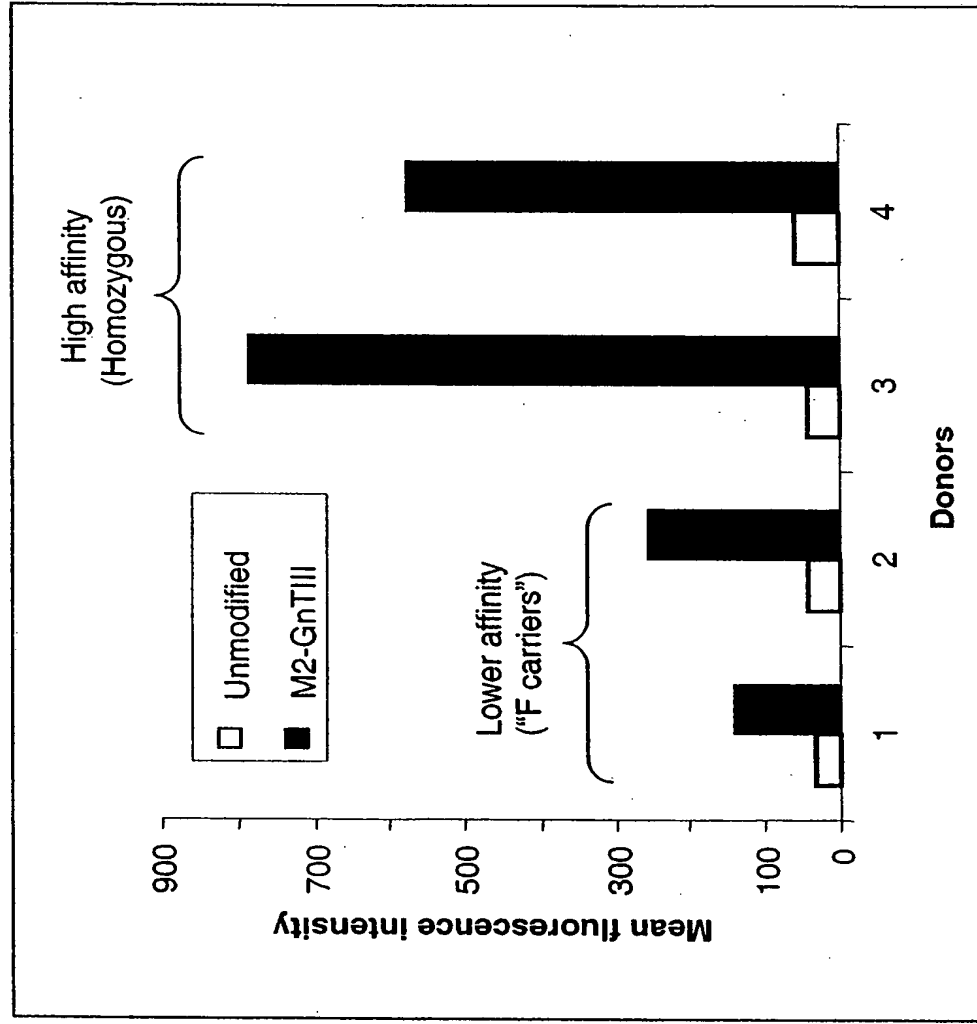


Figure 17

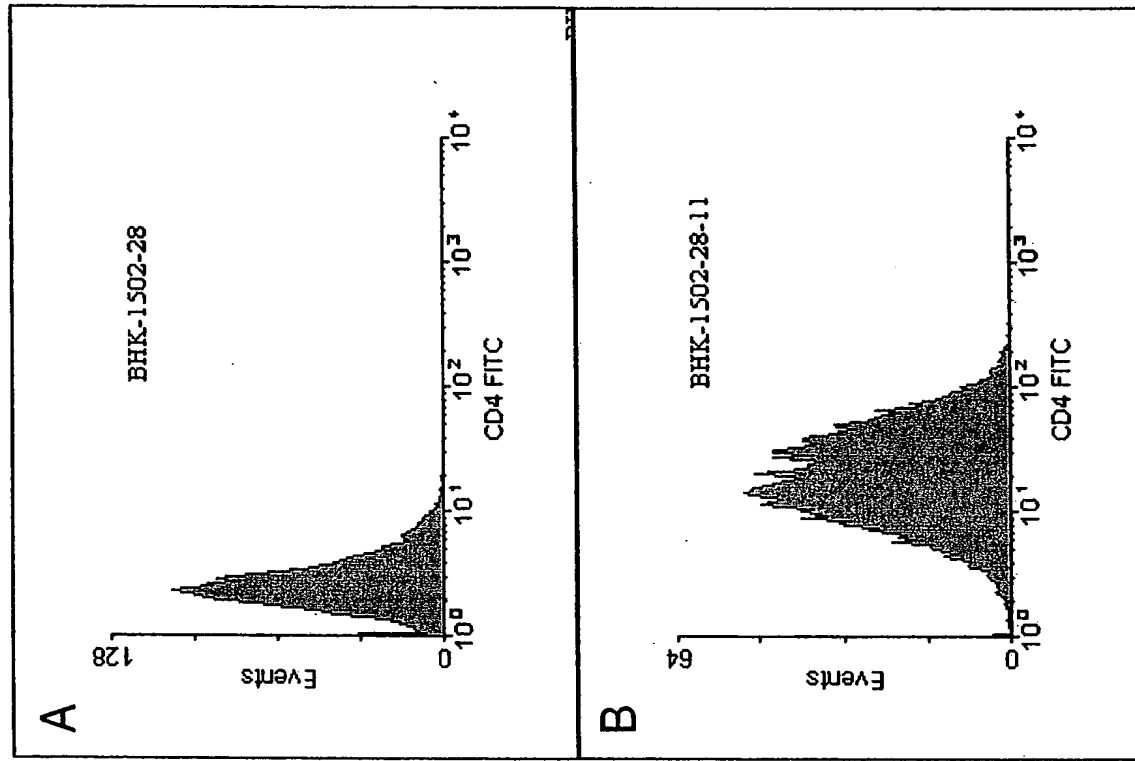


Figure 18

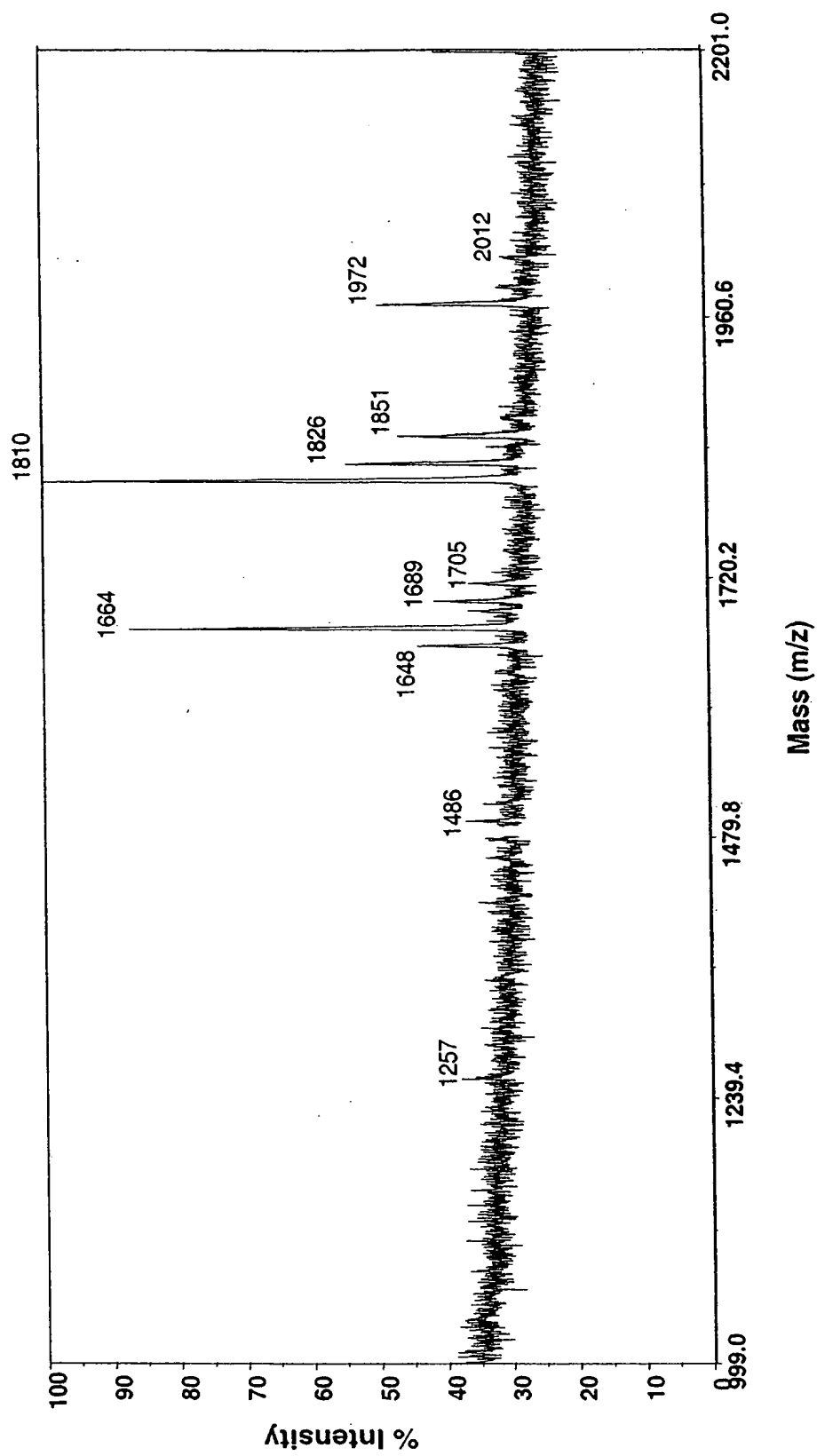


Figure 19

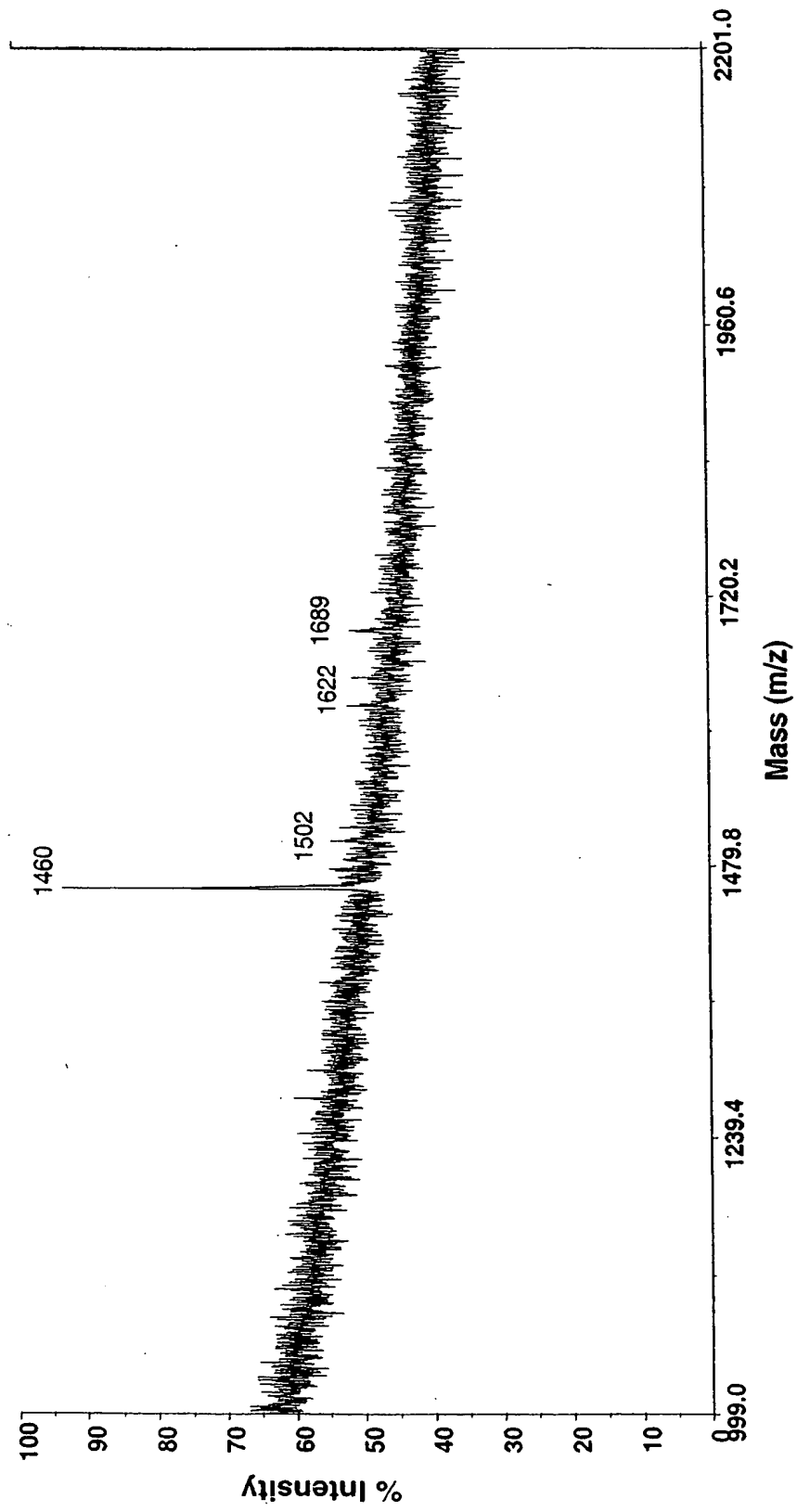


Figure 20

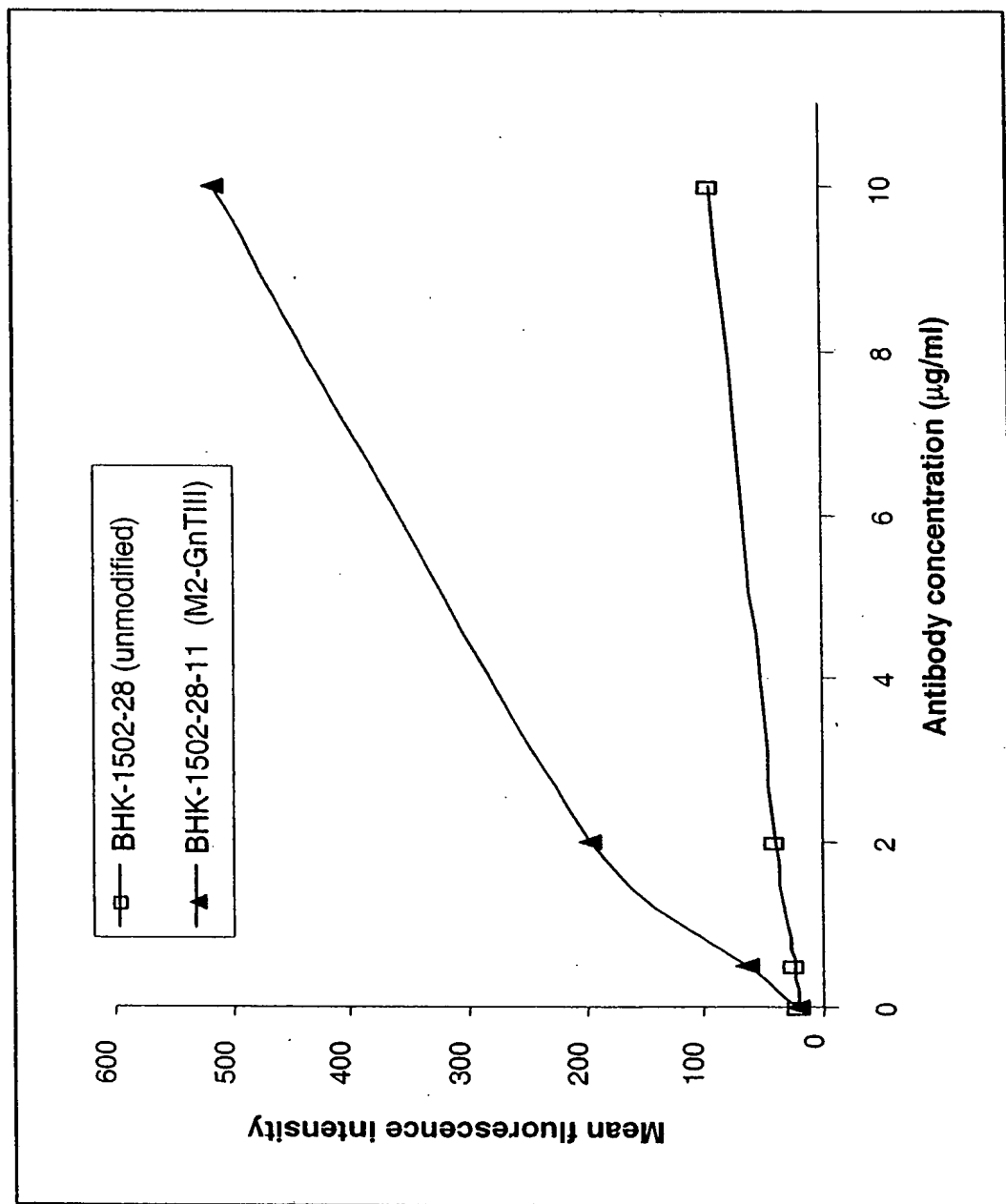


Figure 21

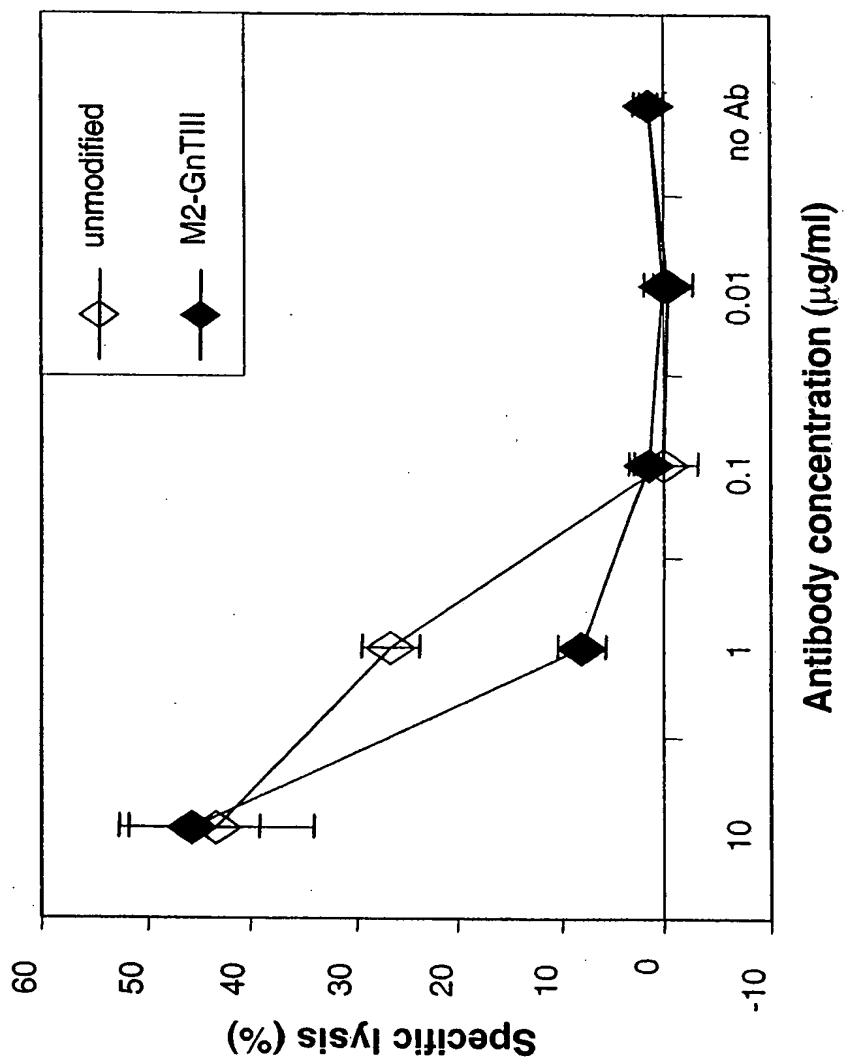


Figure 22

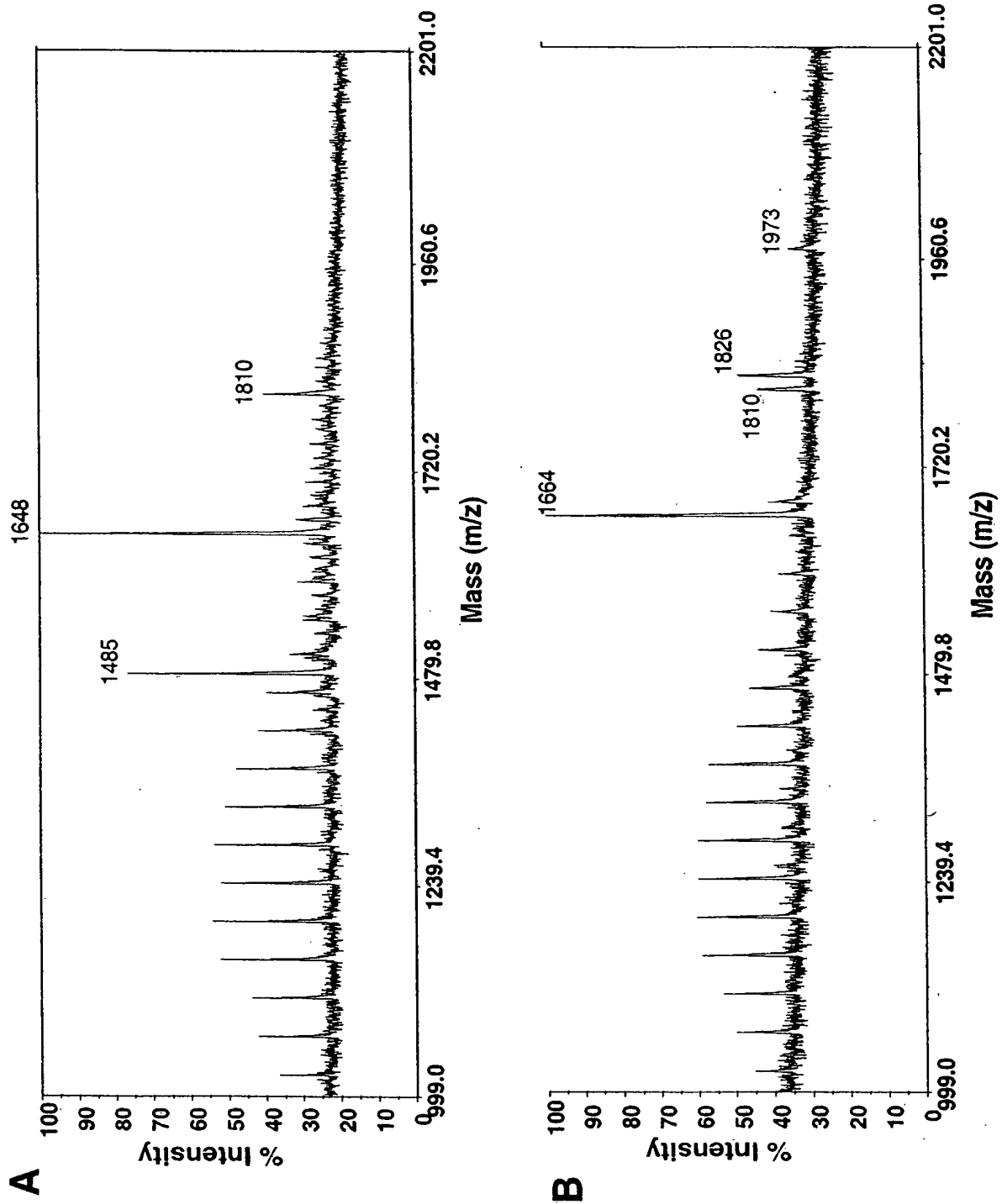
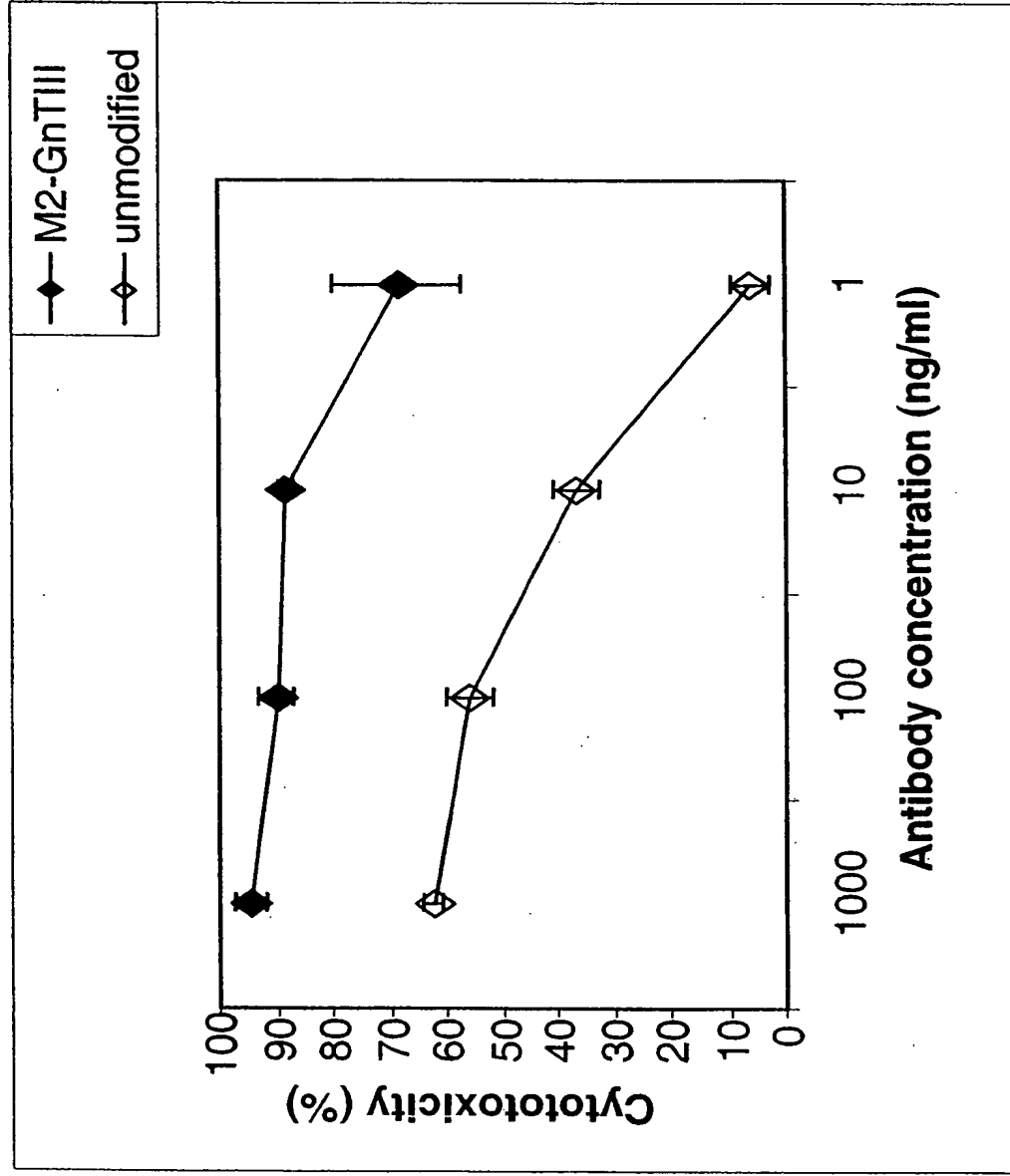


Figure 23



ManII-GnTIII:

Bold: ManII localization domain (cytoplasmic tail + transmembrane region + stem region)

ATGAAGTTAAGCCGCCAGTTCACCGTGTTCCGGCAGTGCGATCTTCTGTGTGGTGATTTTC
TCGCTCTACCTGATGCTGGACCGGGGTCACTTAGACTACCCAGGAACCCGCGCCGCGAG
GGCTCCTTCCCTCAGGGCCAGCTCTCAATGTTGCAAGAAAAATAGACCATTGAGAGCGT
TTGCTAGCTGAGAATAATGAGATCATCTCAAATATTAGAGACTCAGTCATCAATTTGAGT
GAGTCTGTGGAGGATGGTCCGAAAAGTTACAAAGCAATTTACGCCAAGGTGCTGGCTCA
CCCCTGCTCCAGCCACTGTCCCCTAGCAAGGCCACCGAAGAACTGCACCGGGTGGACTTC
GTGTTGCCGGAGGACACCACAGAGTATTTGTGTGCGACCAAAGCTGGCGGTGTGTGCTTC
AAACCAGGTACCAGGATGCTGGAGAAACCTTCTCCAGGGCGGACAGAGGAGAAGACCAAG
GTGGCTGAGGGGTCCCTCGGTCCGGGGTCTGCTCGGAGGCCTATGCGGCATGTGTTGAGT
GCACGGGAGCGCCTGGGAGGCCCGGGCACTAGGCGCAAGTGGGTGAGTGTGTGTGCCTG
CCAGGCTGGCACGGGGCCAGCTGCGGGGTGCCCACTGTGGTCCAGTATTCCAACCTGCCC
ACCAAGGAGCGCCTGGTACCCAGGGAGGTGCCGAGGCGGGTTATCAACGCCATCAACATC
AACCATGAGTTCGACCTGCTGGATGTGCGCTTCCATGAGCTGGGCGATGTTGTGGACGCC
TTTGTGGTCTGCGAATCCAATTTACCCGCCTACGGGGAGCCTCGGCCGCTCAAGTTCCGA
GAGATGCTGACCAATGGCACCTTCGAGTACATCCGCCACAAGGTGCTCTACGTCTTCCTG
GACCACTTCCCACCTGGTGGCCGTCAGGACGGCTGGATTGCAGACGACTACCTGCGTACC
TTCTCACCCAGGATGGTGTCTCCCGCCTGCGCAACCTGCGACCTGATGACGTCTTTATC
ATCGACGACGCGGACGAGATCCCTGCGCGTGATGGTGTGCTGTTCTCAAGCTCTACGAT
GGCTGGACAGAGCCCTTCGCCTTCCATATGCGCAAGTCCCTGTATGGTTTCTTTTGGAG
CAACCAGGCACACTGGAGGTGGTGTGAGGCTGCACCATTGACATGCTGCAGGCCTGTGTAT
GGGCTGGACGGCATCCGCCTGCGCCGCCGTGAGTACTACACCATGCCCAACTTTTCGACAG
TATGAGAACCGCACCGGCCACATCCTAGTGCAGTGGTCTCTCGGCAGCCCCCTGCACTTC
GCGGGCTGGCACTGCTCCTGGTGTCTCACACCCGAGGGCATCTACTTCAAACCTCGTGTG
GCCCCAGAAATGGTGACTTCCCCCGCTGGGGTGACTACGAGGACAAGAGGGACCTCAATTAC
ATCCGAAGCTTGATTGCACTGGGGGATGGTTCGACGGCACGCAGCAGGAGTACCCTCCT
GCAGACCCAGTGAACACATGTATGCTCCTAAGTACCTGCTCAAGAACTATGACCAGTTC
CGTACTTGCTCGAAAATCCCTACCGGGAGCCCAAGAGCACTGTAGAGGGTGGGCGCCGG
AACCAGGGCTCAGACGGAAGGTCATCTGCTGTCAGGGGCAAGTTGGATACAACGGAGGGC
CCGGAACAGAACTGATCTCTGAAGAGGACCTGTAG

MKLSRQFTVFGSAIFCVVIFSLYLMLDRGHLDYPRNPRREGSFPQGQLSMLQEKIDHLER
LLAENNEIISNIRDSVINLSESVEDGPKSSQSNFSQGAGSPLLQPLSPSKATEELHRVDF
VLPEdTTEYFVVRTKAGGVCFKPGTRMLEKPSPGRTEETKVAEGSSVRGPARRPMPRHVLS
ARERLGGRGTRRKWVECVCLPGWHGPSCGVPTVVQYSNLPTKERLVPREVPRRVINAINI
NHEFDLLDVRFHLDVVDADFVVCESNFTAYGEPRPLKFREMLTNGTFEYIRHKVLYVFL
DHFPPGGRQDQWIADYLRFTLTQDGVSRRLNLRPDDVFIIDDADEIPARDGVFLFLKLYD
GWTEPFAFHMRKSLYGFVWKQPGTLEVVSCTIDMLQAVYGLDGIRLRRRQYYTMPNFRQ
YENRTGHILVQWSLGSPLHFAGWHCSWCFTPEGIYFKLVSAQNGDFPRWGDYEDKRDLY
IRSLIRTGGWFDGTQOEYPPADPSEHMYAPKYLLKNYDQFRYLLNPYREPSTVEGGRR
NQGS DGRSSAVRGKLDTTEGPEQKLISEEDL

Figure 24

GnTI-GnTIII

Bold: GnTI ManII localization domain (cytoplasmic tail + transmembrane region + stem region)

**ATGCTGAAGAAGCAGTCTGCAGGGCTTGTGCTGTGGGGCGCTATCCTCTTTGTGGCCTGG
AATGCCCTGCTGCTCCTCTTCTTCTGGACGCGCCAGCACCTGGCAGGCCACCCTCAGTC
AGCGCTCTCGATGGCGACCCCGCCAGCCTCACCCGGAAGTGATTGCTTGGCCCAAGAC
GCCGAGGTGGAGCTGGAGCGGCAGCGTGGGCTGCTGCAGCAGATCGGGGATGCCCTGTGCG
AGCCAGCGGGGGAGGGTGCCACCCGCGGCCCTCCCGCCAGCCGCGTGTGCCTGTGACC
CCCGCGCCCCCTGCTCCAGCCACTGTCCCCTAGCAAGGCCACCGAAGAACTGCACCGGGTG
GACTTCGTGTTGCCGGAGGACACCACAGAGTATTTTGTGCGCACCAAGCTGGCGGTGTG
TGCTTCAAACCAGGTACCAGGATGCTGGAGAAACCTTCTCCAGGGCGGACAGAGGAGAAG
ACCAAGGTGGCTGAGGGGTCTCGGTCGGGGGTCTGCTCGGAGGCCTATGCGGCATGTG
TTGAGTGCACGGGAGCGCTGGGAGGCCGGGGCACTAGGCGCAAGTGGGTGAGTGTGTG
TGCCTGCCAGGCTGGCACGGGCCCAGCTGCGGGGTGCCCACTGTGGTCCAGTATTCCAAC
CTGCCCCACCAAGGAGCGCTGGTACCCAGGGAGGTGCCGAGGCGGGTTATCAACGCCATC
AACATCAACCATGAGTTCGACCTGCTGGATGTGCGCTTCCATGAGCTGGGCGATGTTGTG
GACGCCTTTGTGGTCTGCGAATCCAATTTACCGCCTACGGGGAGCCTCGGCCGCTCAAG
TTCCGAGAGATGCTGACCAATGGCACCTTTCGAGTACATCCGCCACAAGGTGCTCTACGTC
TTCCTGGACCACTTCCCACCTGGTGGCCGTGAGGACGGCTGGATTGCAGACGACTACCTG
CGTACCTTCCTCACCCAGGATGGTGTCTCCCGCTGCGCAACCTGCGACCTGATGACGTC
TTTATCATCGACGACGCGGACGAGATCCCTGCGCGTGATGGTGTGCTGTTCTCAAGCTC
TACGATGGCTGGACAGAGCCCTTCGCCTTCCATATGCGCAAGTCCCTGTATGGTTTCTTT
TGGAAGCAACCAGGCACACTGGAGGTGGTGTGAGGCTGCACCATTGACATGCTGCAGGCT
GTGTATGGGCTGGACGGCATCCGCTGCGCCGCCGTGAGTACTACACCATGCCCAACTTT
CGACAGTATGAGAACCGCACCGGCCACATCCTAGTGCAGTGGTCTCTCGGCAGCCCCCTG
CACTTCGCGGGCTGGCACTGCTCCTGGTGTCTCACACCCGAGGGCATCTACTTCAAACCTC
GTGTGCGGCCAGAATGGTGACTTCCCCCGCTGGGGTGACTACGAGGACAAGAGGGACCTC
AATTACATCCGAAGCTTGATTGCACTGGGGGATGGTTGACGCGCACGAGAGGAGTAC
CCTCTGCAGACCCCAAGACACATGTATGCTTCCCTAAGTACCTGCTCAAGAATATGAC
CAGTTCCGCTACTTGCTCGAAAATCCCTACCGGGAGCCCAAGAGCACTGTAGAGGGTGGG
CGCCGGAACCAGGGCTCAGACGGAAGGTCATCTGCTGTCAGGGGCAAGTTGGATACAACG
GAGGGCCCGGAACAGAACTGATCTCTGAAGAGGACCTGTAG**

**MLKKQSAGLVWLWGAIFVAWNALLLFFWTRPAPGRPPSVSALDGDPA SLTRE VIRLAQD
AEVELERQ RGLLQ QIGDALSSQRGRVPTA APPAQPRVPVTPAPLLQPLSPSKATEELHRV
DFVLPEDTTEYFVRTKAGGVCFKPGTRMLEKPSPGRTEEKTKVAEGSSVRGPARRPMRHV
LSARERLGGGRTRRKWVECVCLPGWHGPSCGVPTVVQYSNLPTKERLVPREVP RRVINAI
NINHEFDLLDVRFH ELGDVVD AFVVCESNFTAYGEPRPLKFREMLTNGTFEYIRHKVLYV
FLDHFPPGGRQD GWIADDYLRFTLTQDGVSR LRNL RPDDVFI IDDADEI PARDGVFLKL
YDGWTEPFAFHMRS LYGFFWKQPGTLEVVSGCTIDMLQAVYGLDGIRLRRRQYYTMPNF
RQYENRTGHILVQWSLGSPLHFAGWHCSWCFTPEGIYFKLVSAQNGDFPRWGDYEDKRD
NYIRSLIRTGGWFDGTQOEYPPADPSEHMYAPKYLLKNYDQFRYLLENPYREPKSTVEGG
RRNQSDGRSSAVRGKLD TTEGPEQKLI SEEDL**

Figure 25.

Voyager Spec #1[BP = 1647.8, 7416]

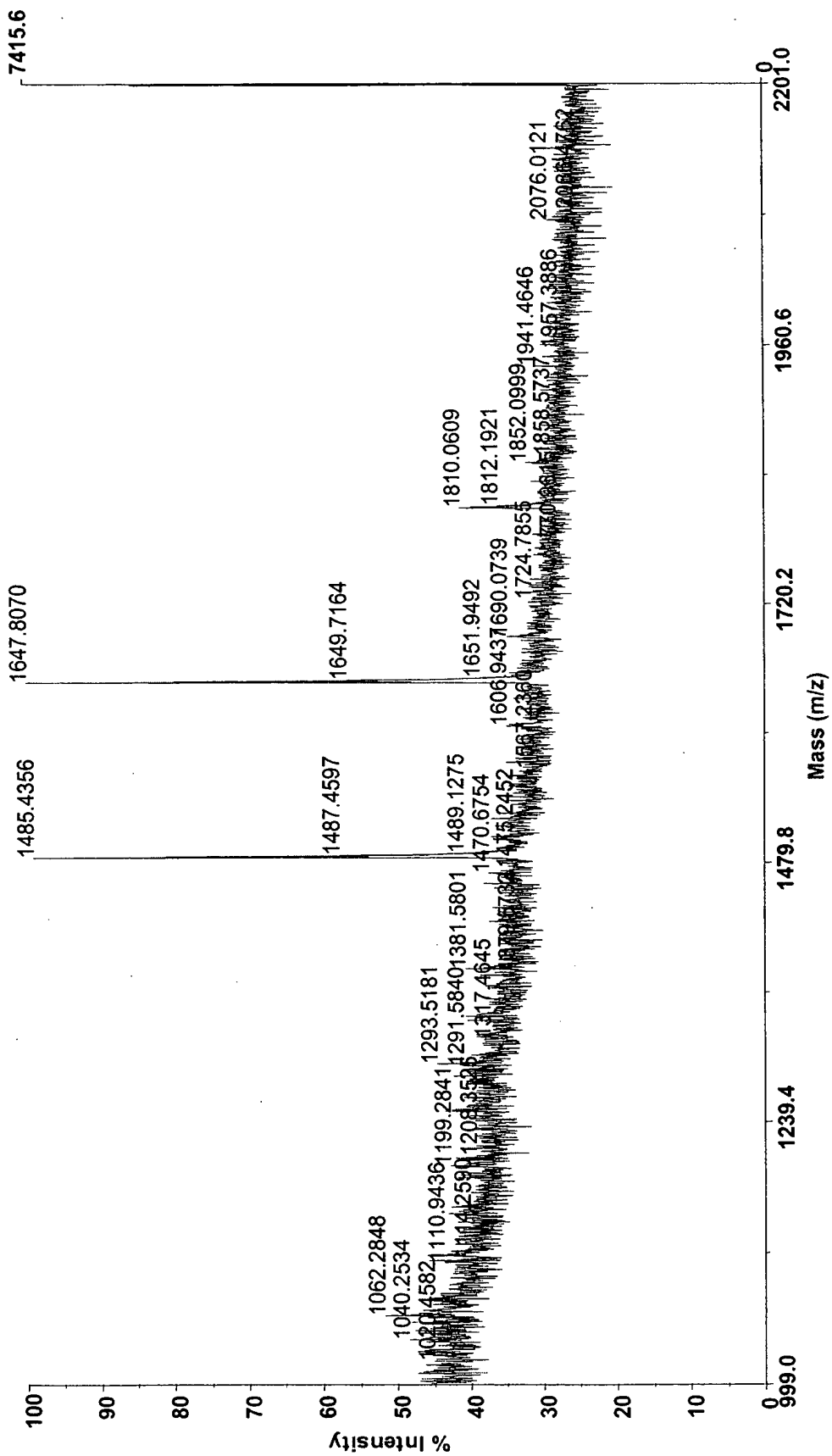


FIG. 26

Voyager Spec #1[BP = 1663.9, 13210]

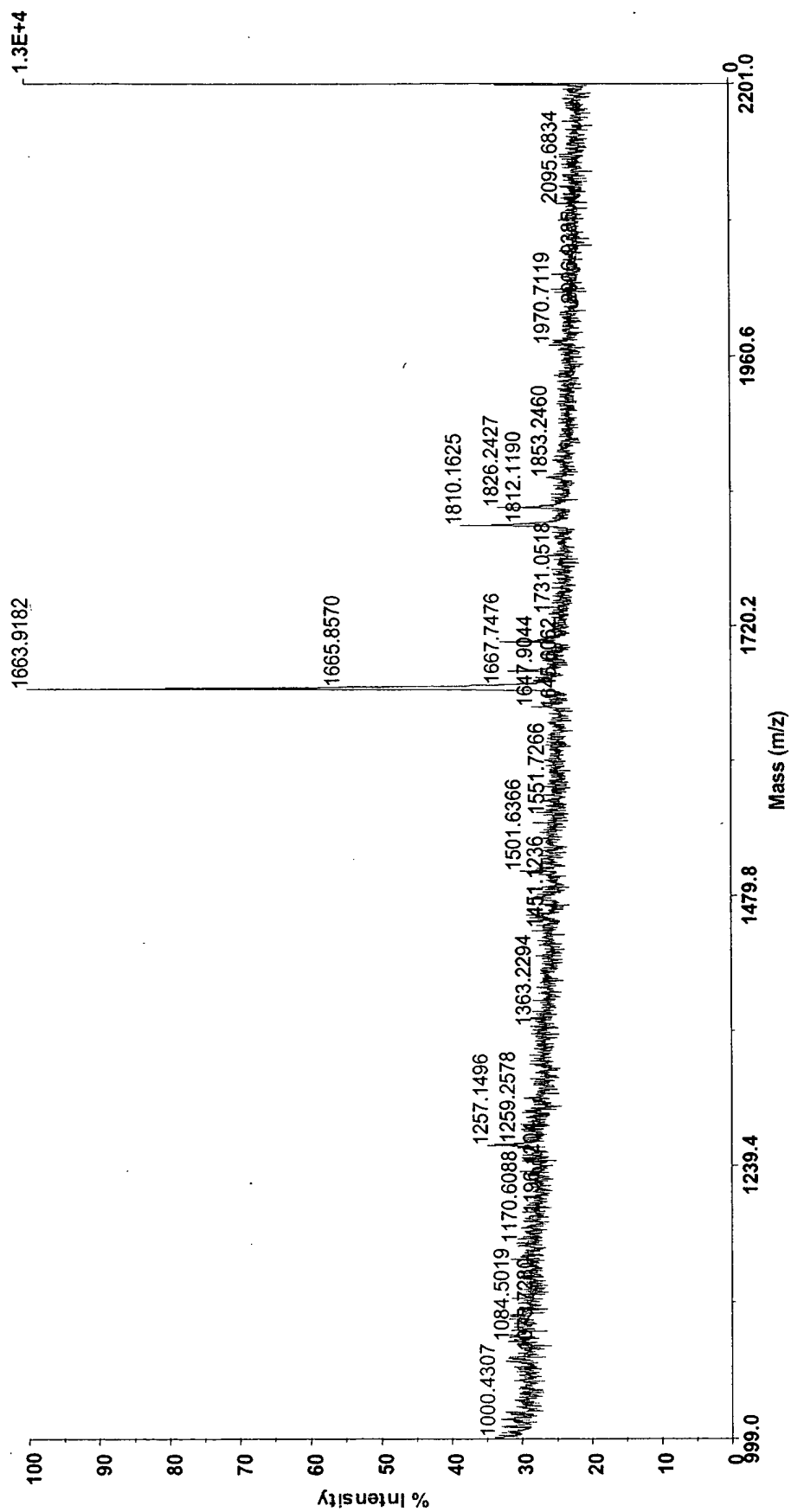


FIG. 27A

Voyager Spec #1[BP = 1460.4, 10880]

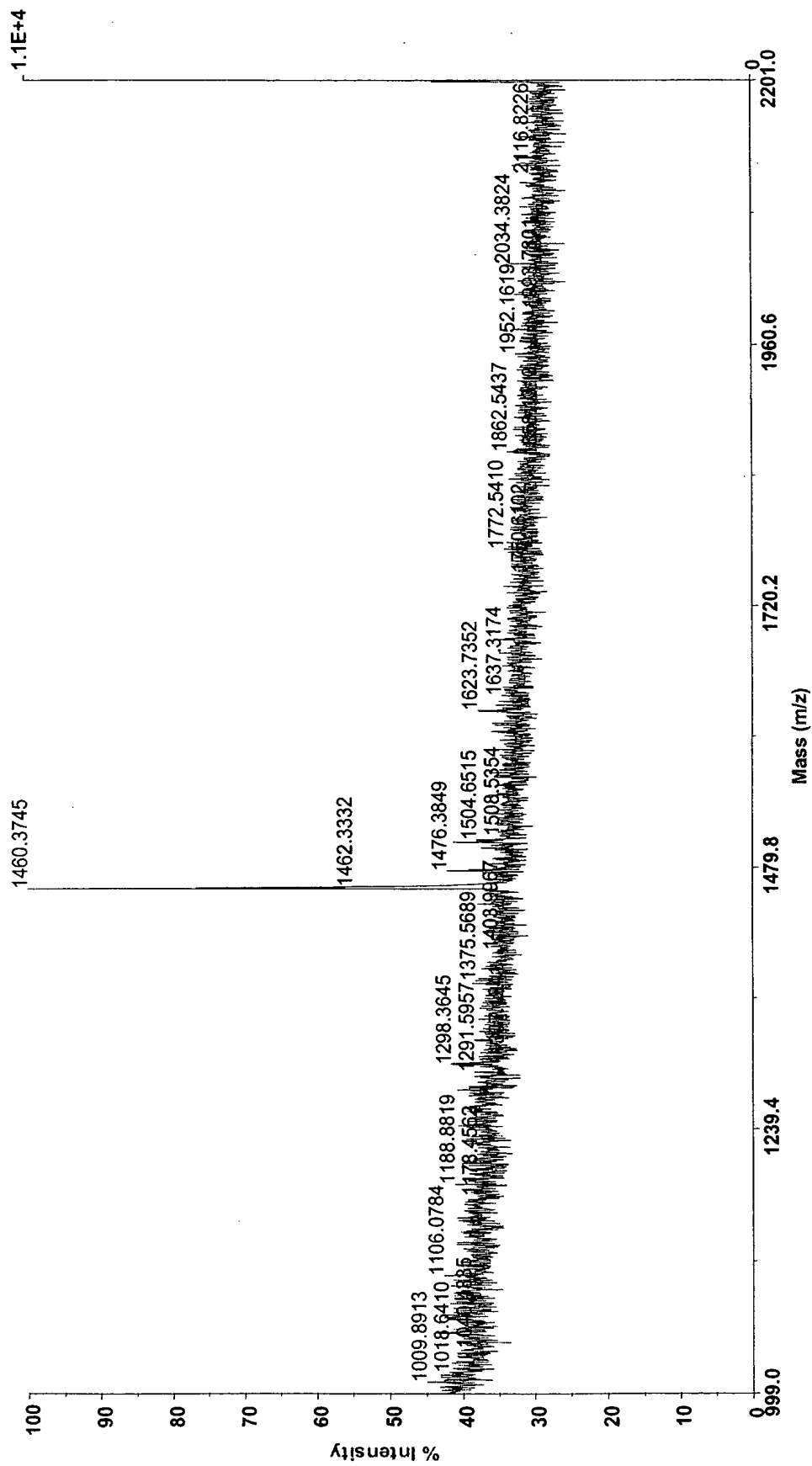


FIG. 27B

Voyager Spec #1[BP = 1542.6, 8192]

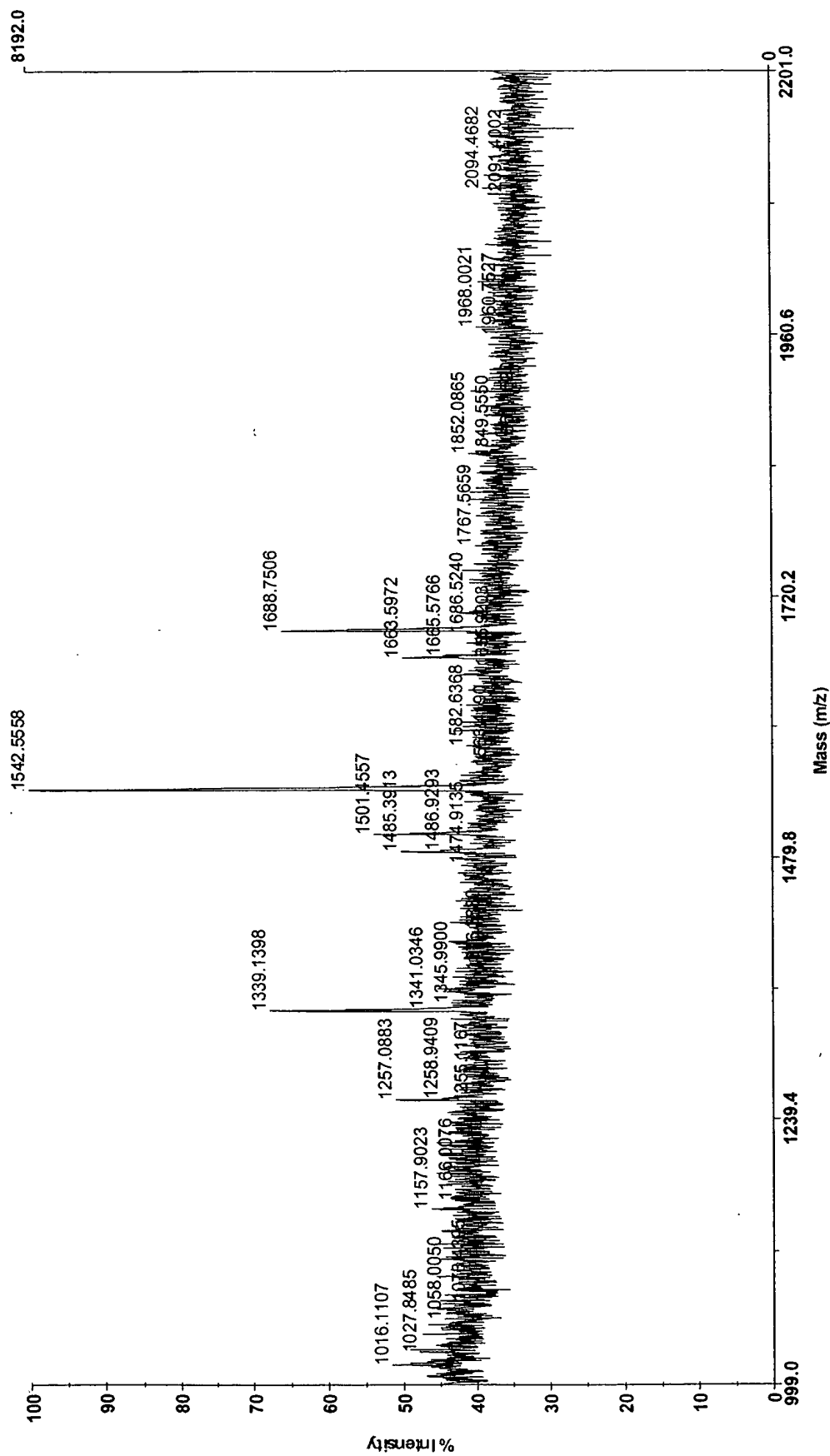


FIG. 28A

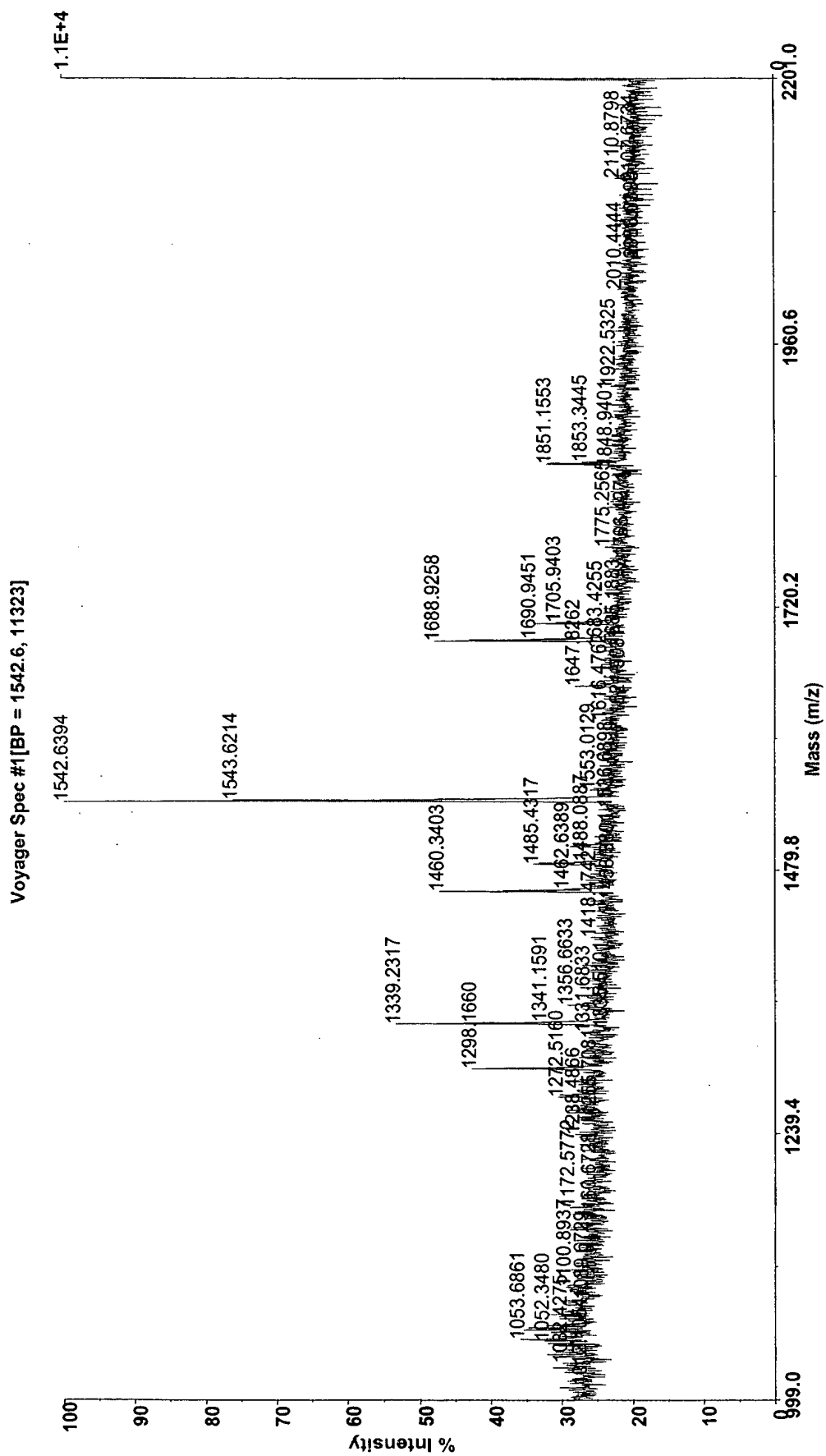


FIG. 28B

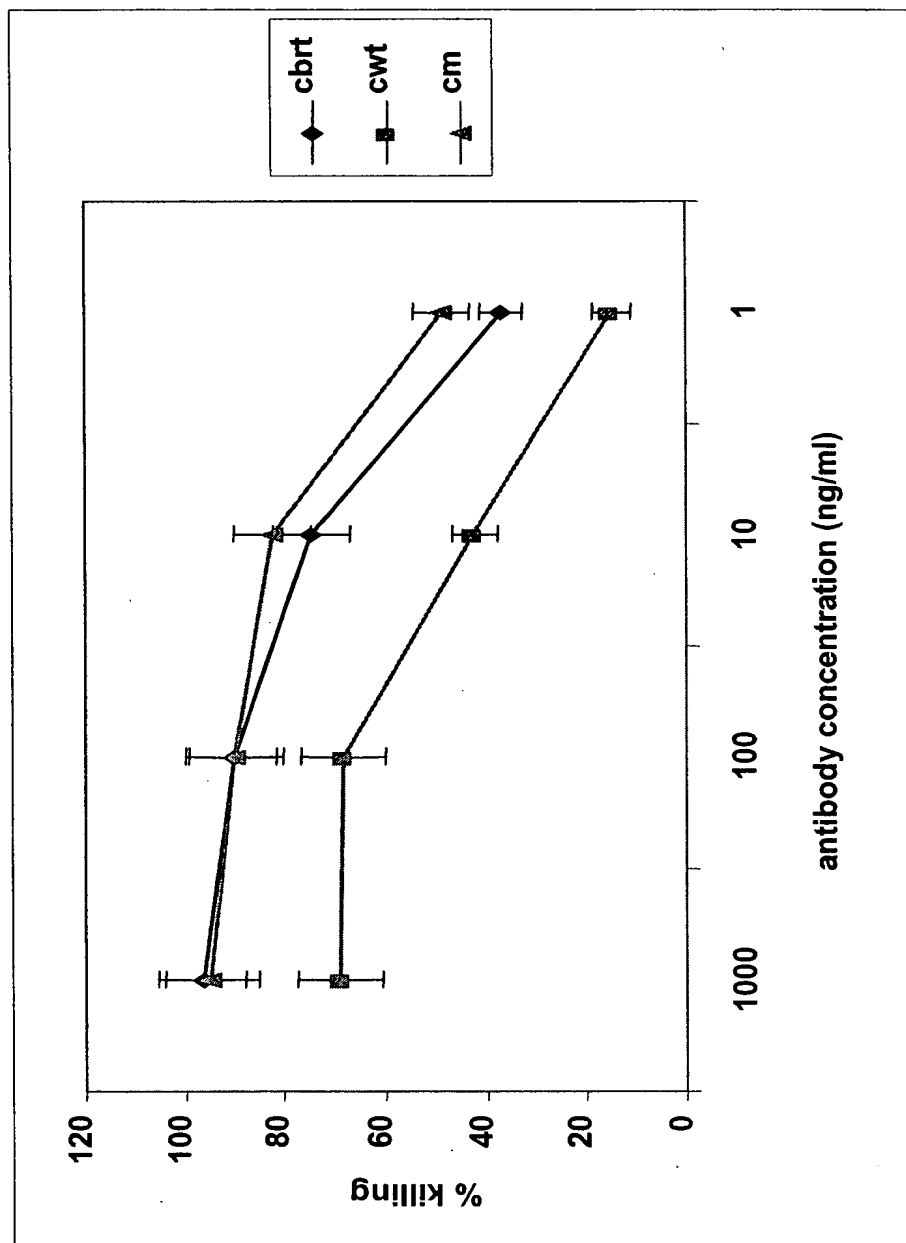


FIG. 29

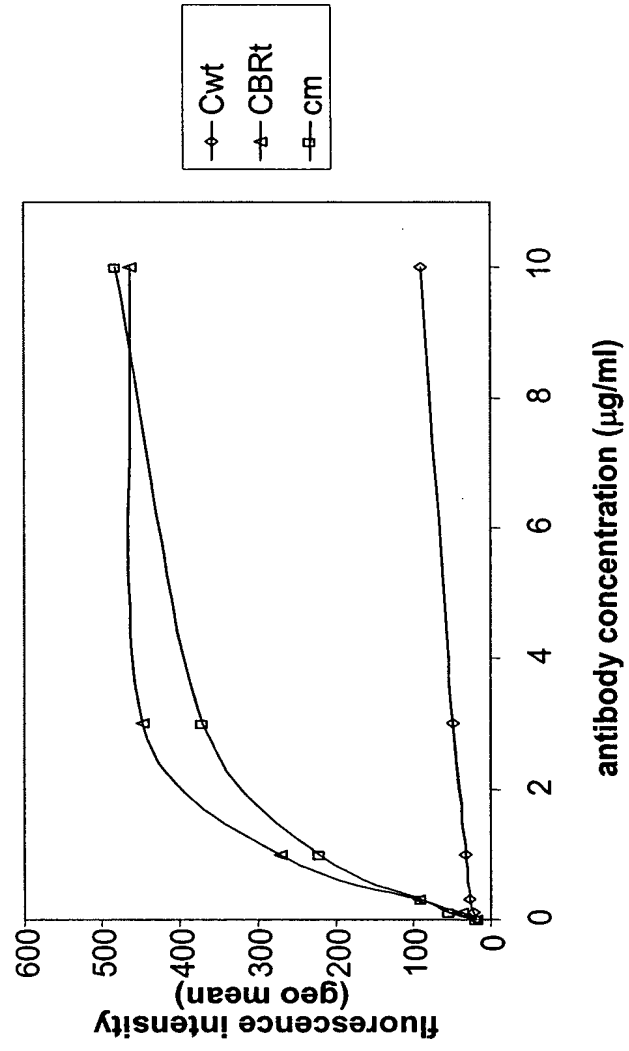


FIG. 30

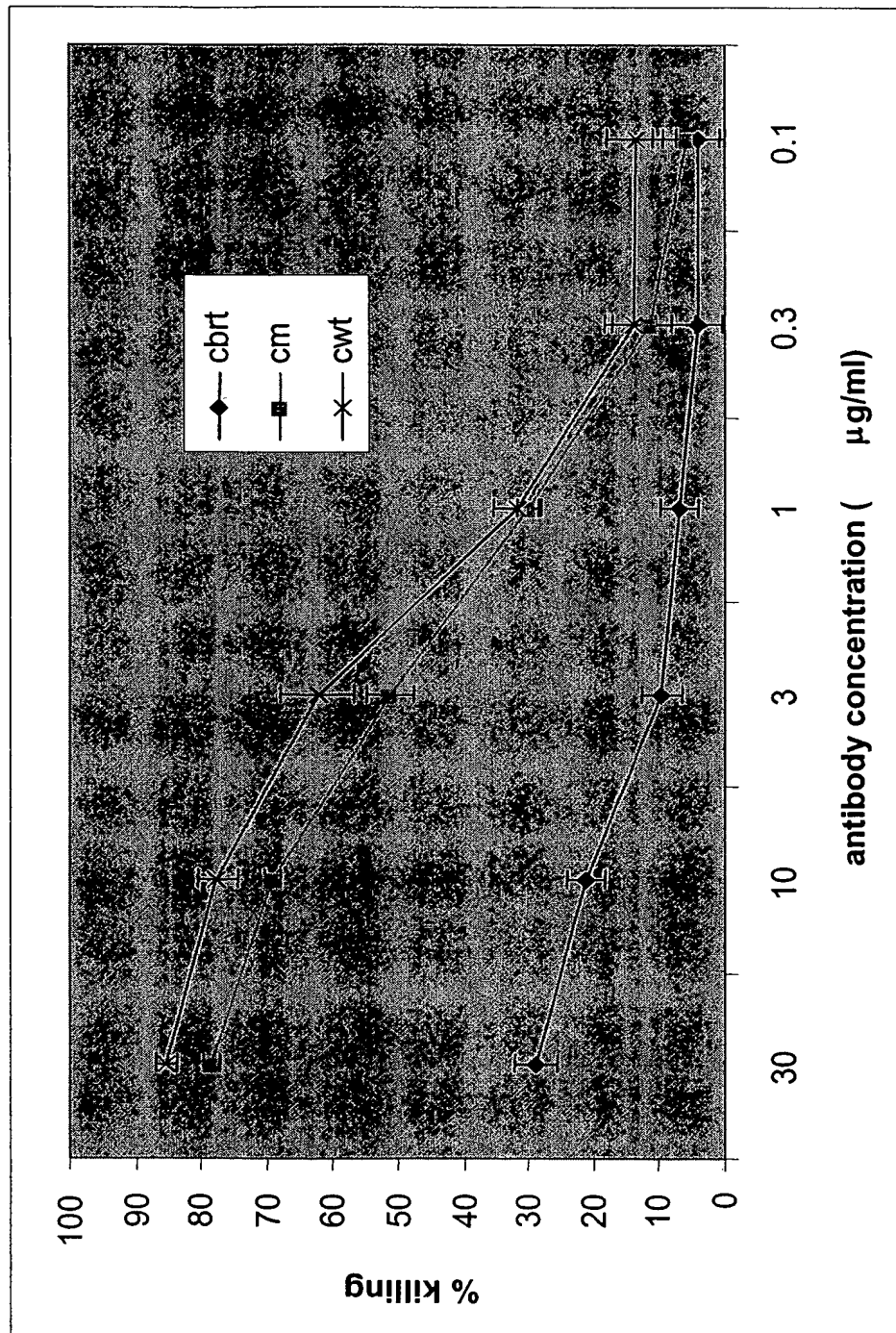


FIG. 31

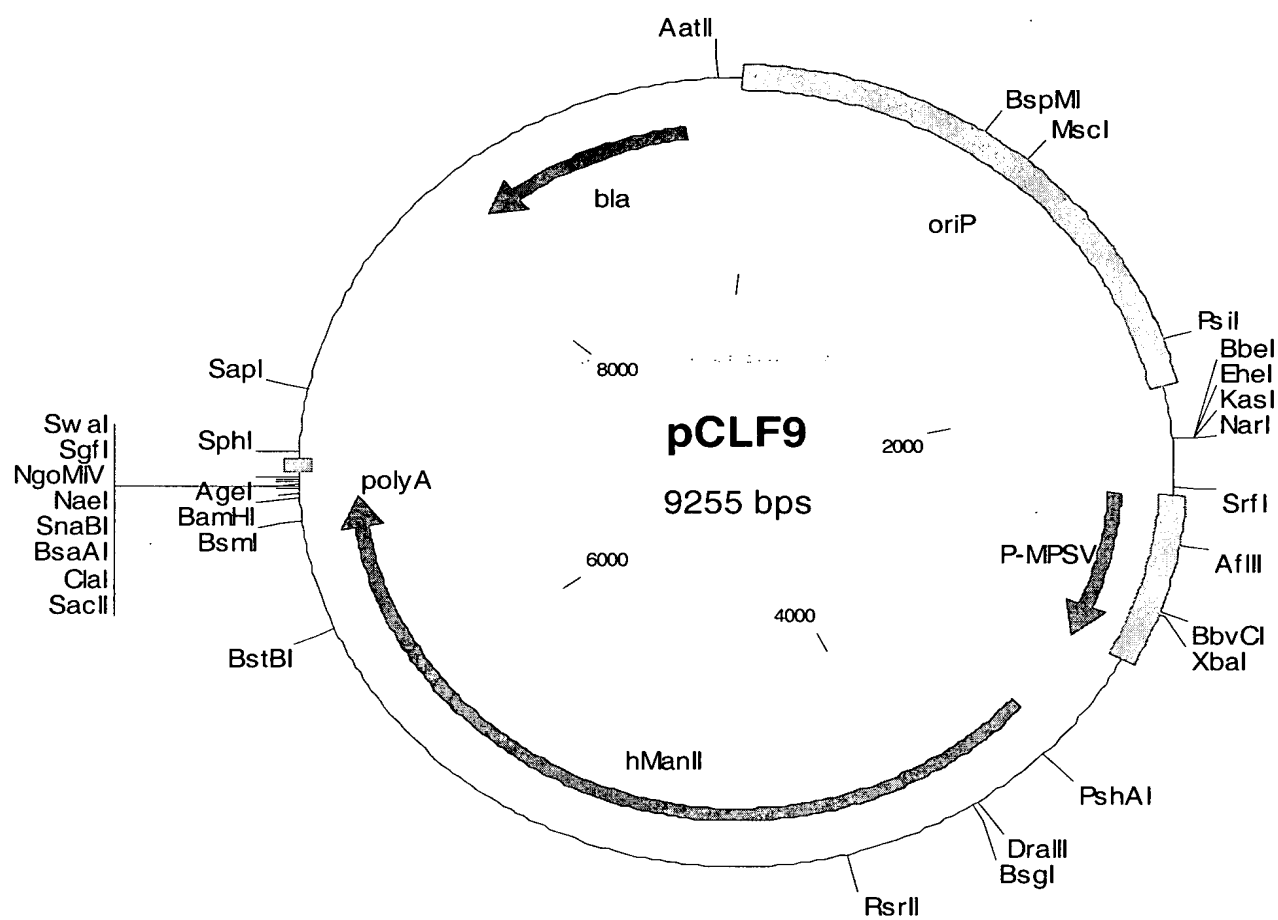


FIG. 32A

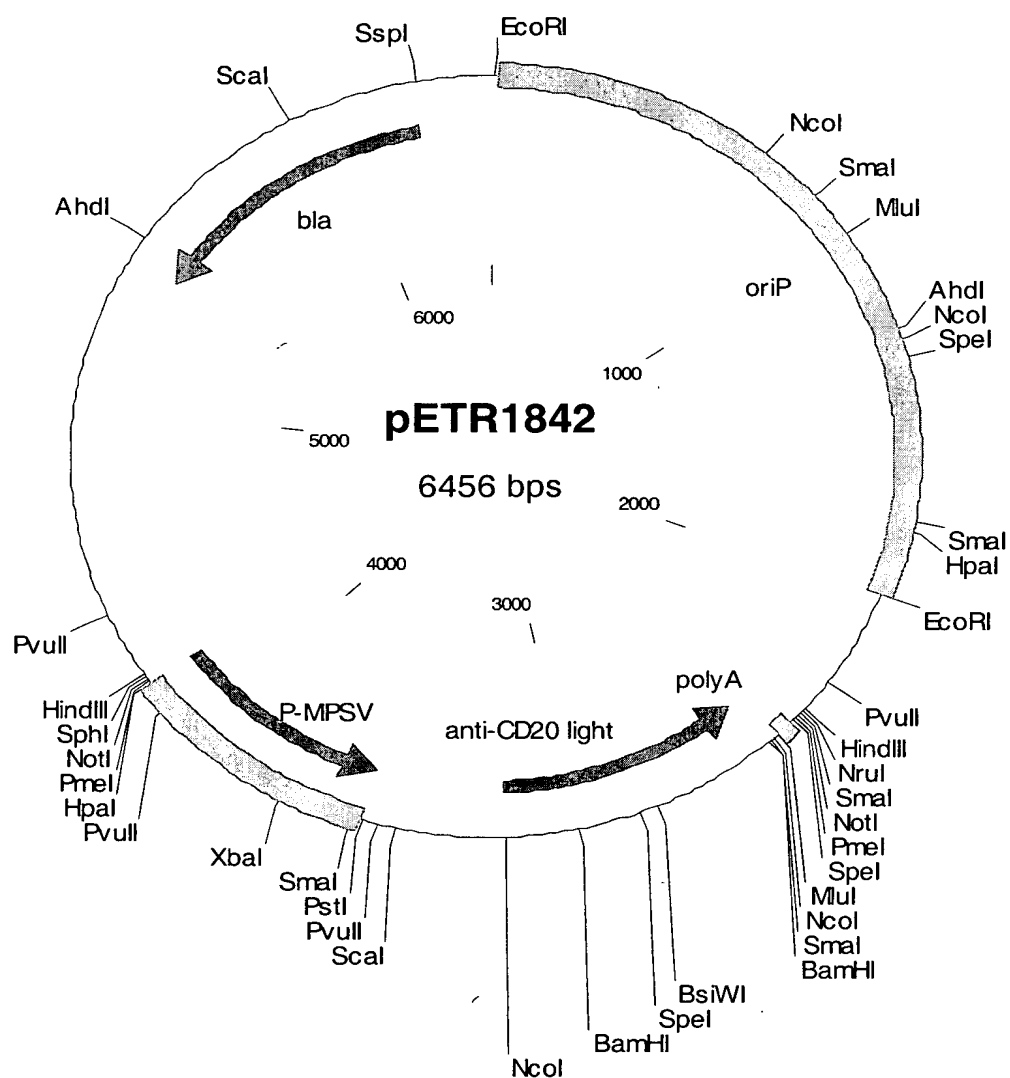


FIG. 32B

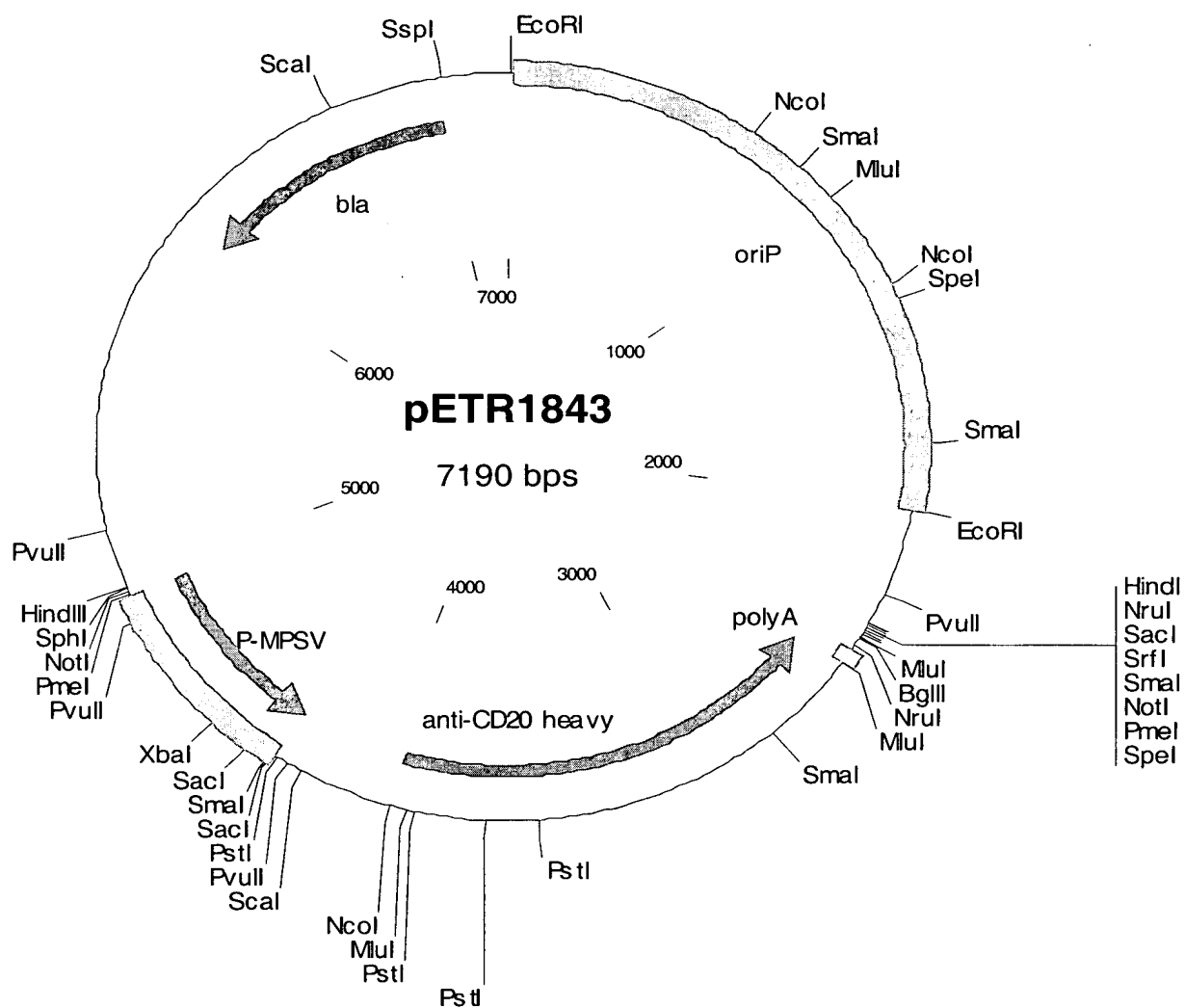


FIG. 32C

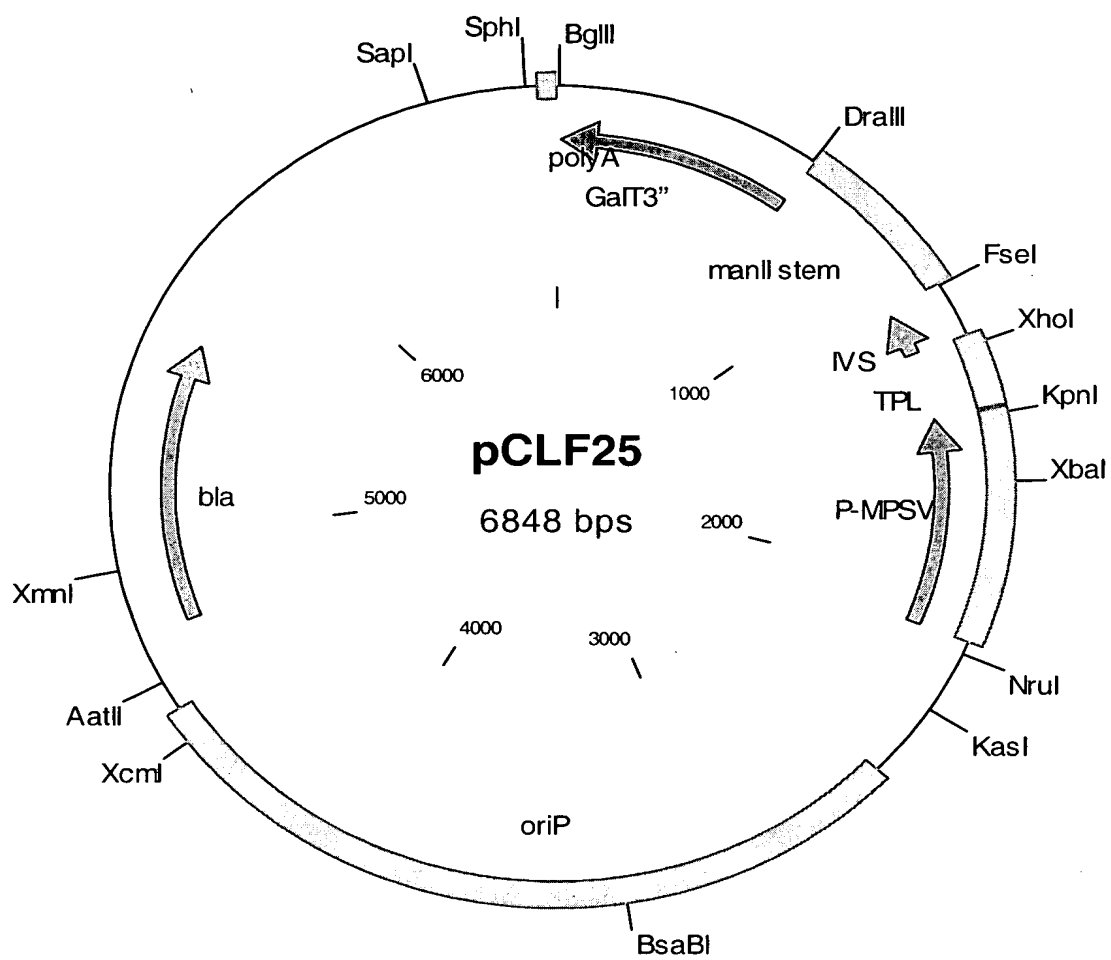


FIG. 33A

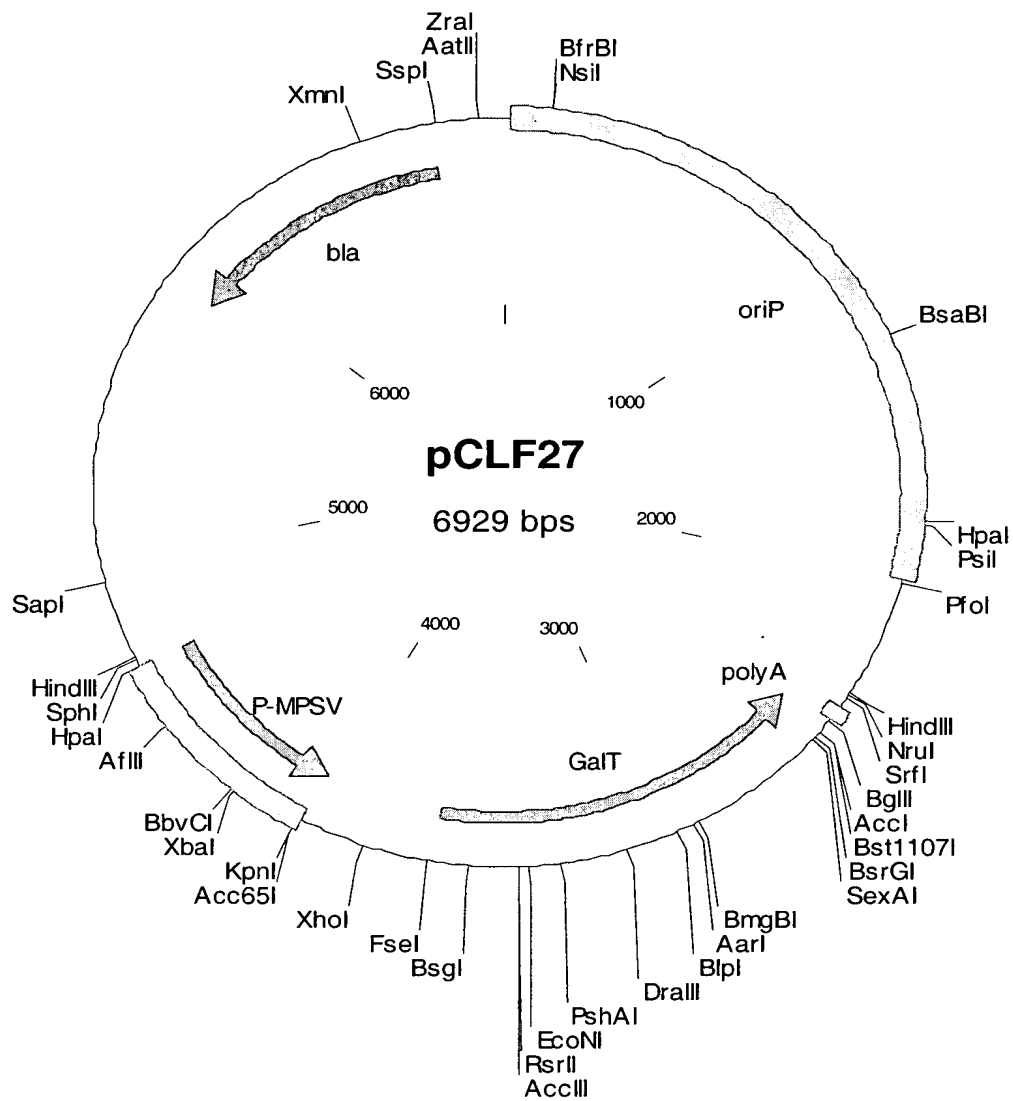
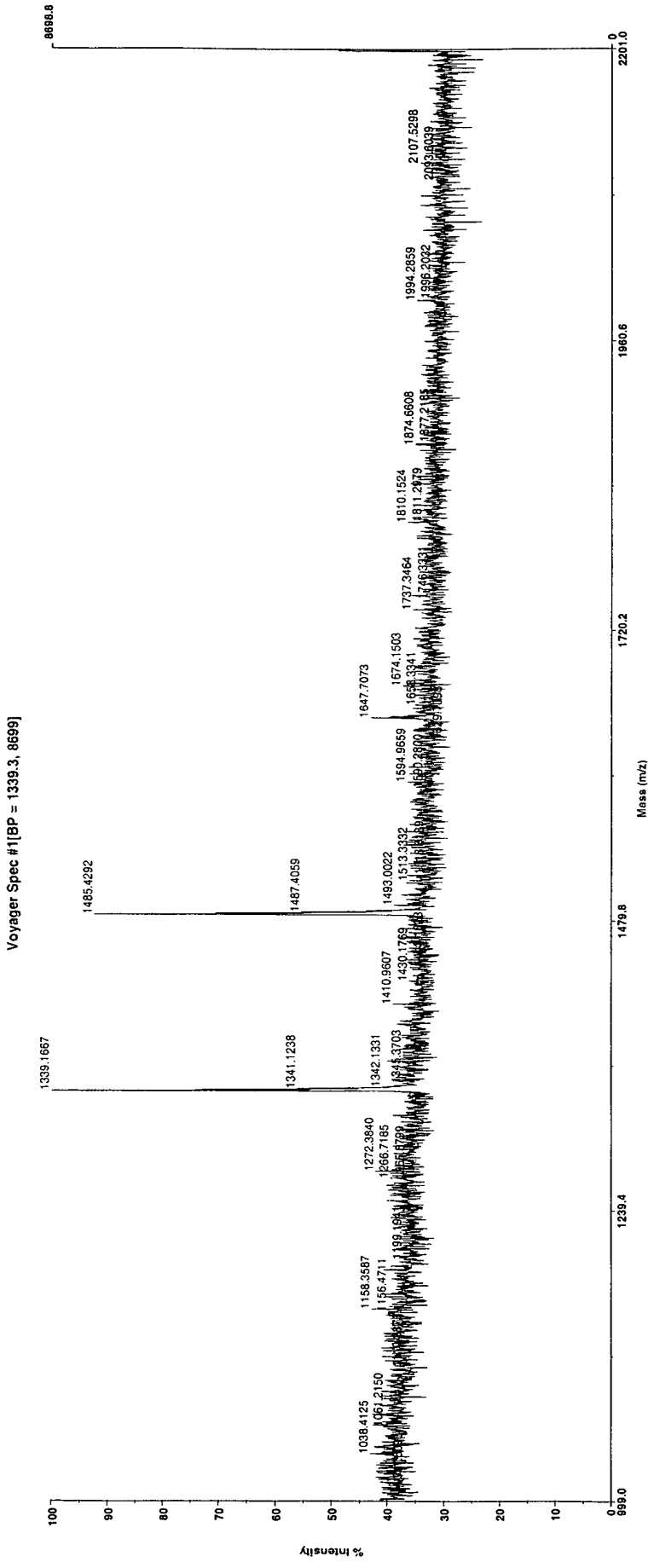


FIG. 33B



	ManII
1339	48.40%
1486	43.30%
1647	8.30%

tot complex 100.00%

non-fuc, complex 48.40%

FIG. 34

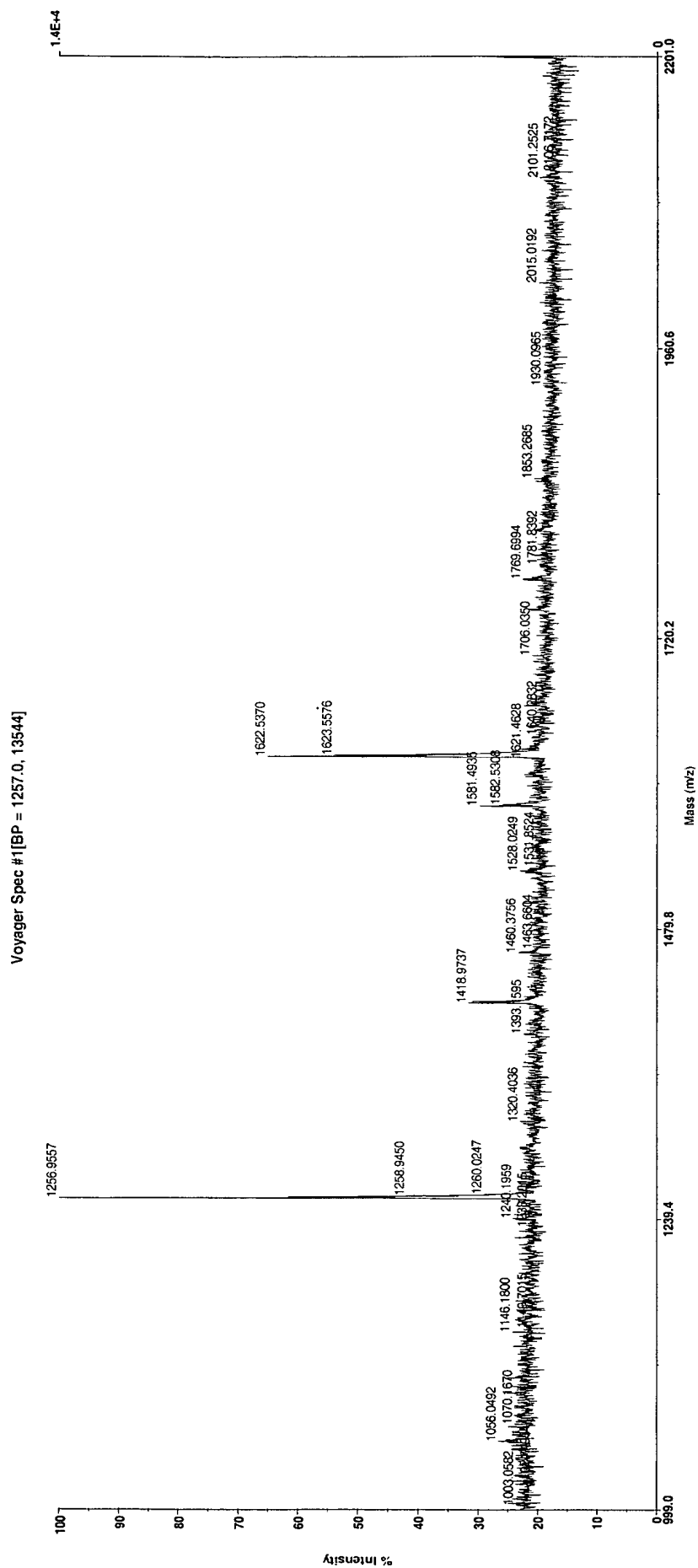
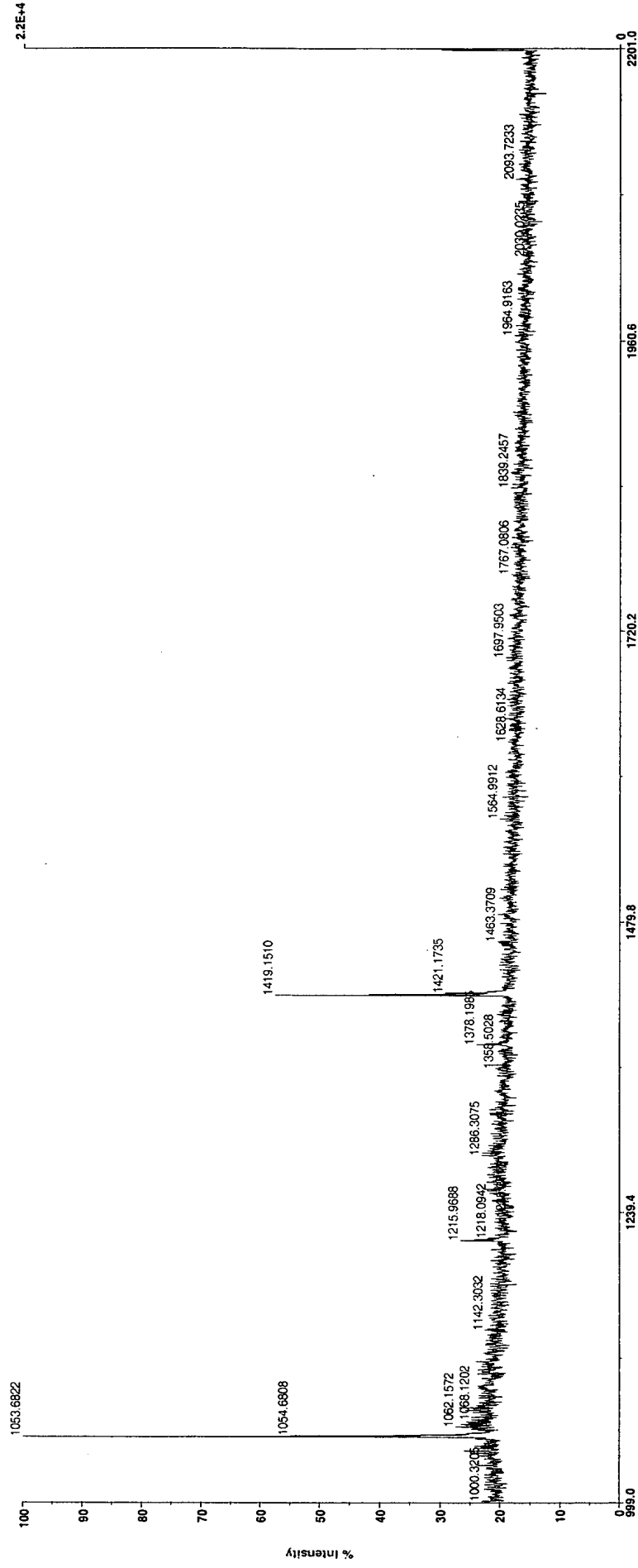


FIG. 35A

Voyager Spec #1[BP = 1053.7, 21948]



	Mass (m/z)	pManII-GalT	+EndoH
1053			66.50%
1256		51.90%	
1419		8.20%	33.50%
1581		7.00%	
1622		30.00%	
1769		2.90%	
		100.00%	100.00%

FIG. 35B

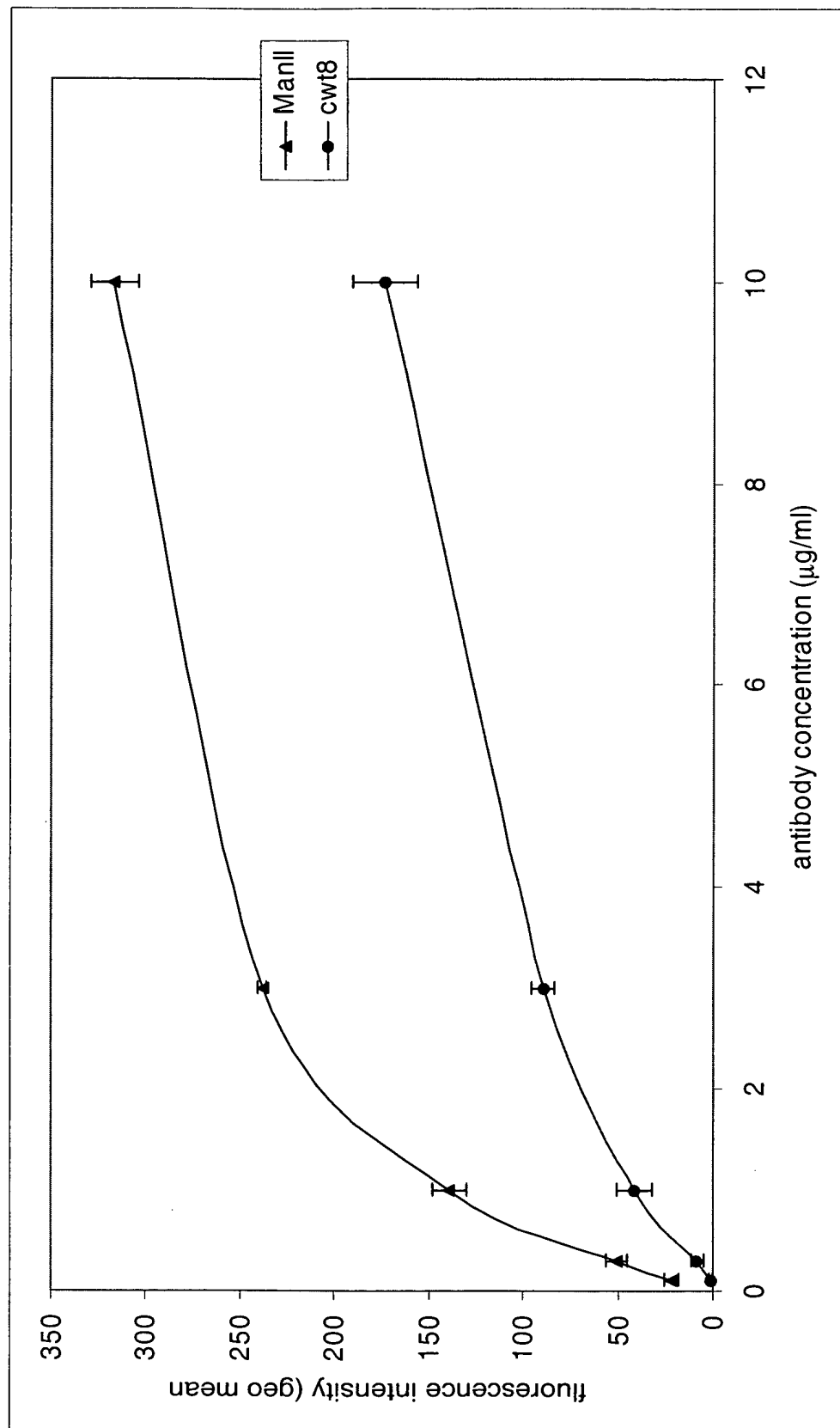


FIG. 36

ADCC mediated by glycoengineered chimeric anti-CD20
IgG1 antibodies against SKW6.4 target cells

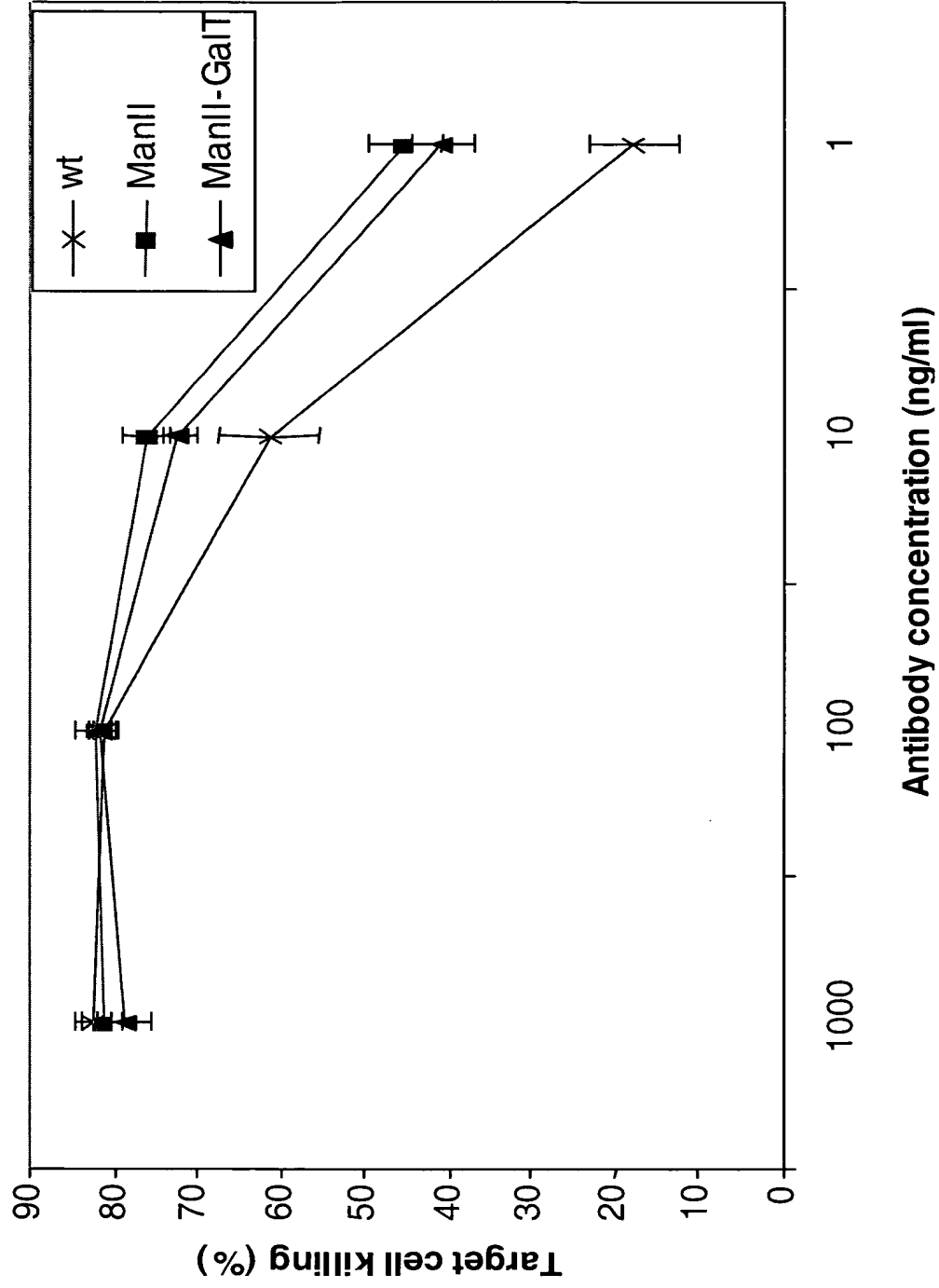


FIG. 37